



U.S. Department  
of Transportation

# Handicapped Planning

## Wisconsin Coordination Manual



#### NOTE

This report was prepared by Ecosometrics, Inc. for the Wisconsin Department of Transportation, which sponsored its preparation in part with a grant from the Urban Mass Transportation Administration. The consultant developed a process for planning coordinated elderly and handicapped transportation services within rural and small urban counties; tested this process by preparing plans in three specific Wisconsin counties; and documented the generic planning process so that it could be applied elsewhere. The planning process described includes an analytical feature which is intended to indicate whether coordination will produce beneficial results.

The Wisconsin Department of Transportation is considering making this manual and the county plans that are based on it generally available to planning organizations and other interested parties in Wisconsin. It does not intend to make plans of this type a requirement, but will instead encourage voluntary planning efforts. The manual should therefore be viewed as a resource used by the state, but not necessarily as a rigid guideline.

The contents of this report reflect the views of Ecosometrics, Inc. which is responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policy of the U. S. Department of Transportation. This report does not constitute a standard, specification or regulation.

WISCONSIN MANUAL TO COORDINATE ELDERLY AND HANDICAPPED  
TRANSPORTATION SERVICES IN RURAL AND SMALL  
URBAN COUNTIES



Sue F. Knapp  
Hannah Worthington  
Jon E. Burkhardt

December 24, 1980

Prepared for the  
Bureau of Transit  
Wisconsin Department of Transportation





· FORWARD

Many transit operators have a need for a manual to coordinate elderly and handicapped transportation services in rural and small urban areas. To assist these operators, UMTA has been funding, through its Section 8 Technical Studies Program, local studies in service coordination. The purpose of these studies is to document such coordination efforts and develop recommendations and plans to accomplish such an activity.

The document summarizes the State of Wisconsin's experience in elderly and handicapped service coordination. We believe this report is an excellent example of service coordination and will be of great interest to transit operators in the rural and small urban areas.

Additional copies of this report are available from the National Technical Information Service (NTIS), Springfield, Virginia 22161.



Charles H. Graves  
Director, Office of Planning  
Assistance  
Urban Mass Transportation Administration  
US Department of Transportation  
Washington, DC 20590



# TABLE OF CONTENTS

	<u>Page</u>
1 -- INTRODUCTION TO COORDINATING ELDERLY AND HANDICAPPED TRANSPORTATION SERVICES .....	1
Why Coordination Efforts Emerged .....	1
Definition of Coordination .....	3
Reasons to Coordinate .....	3
Coordination Objectives and Strategies .....	4
Coordination in the State of Wisconsin .....	5
Use of the Manual .....	7
2 -- ASSESSING THE NEED FOR COORDINATION .....	9
Components of This Chapter .....	9
Study Advisory Committee .....	13
The Need for Elderly and Handicapped Transportation .....	14
An Inventory of the Transportation Services Currently Available to the Elderly and Handicapped .....	28
The Need for Coordination of Transportation Services .....	34
3 -- DEVELOPING OBJECTIVES, STRATEGIES AND ALTERNATIVE APPROACHES FOR THE COORDINATION EFFORT .....	43
Components of This Chapter .....	43
Specific Objectives for Coordination .....	46
Strategies for Meeting Objectives .....	48
Alternatives for the Overall Approach to Coordination .....	54
Coordination Concepts .....	58
4 -- DECIDING ON A SERVICE DESIGN APPROACH .....	65
Components of This Chapter .....	65
Probable Cost .....	69
Probable Ridership Range .....	71
Probable Revenue .....	76
Potential Implementation Issues .....	77
Choosing a Coordination Approach .....	78
5 -- DEVELOPING THE FINANCIAL PLAN .....	81
Components of This Chapter .....	81
Budget .....	84
Funding Sources .....	87
Billing and Accounting .....	89
Record-Keeping .....	92

## Table of Contents (continued)

	<u>Page</u>
6 -- FINALIZING PLANNING DECISIONS .....	95
Components of This Chapter .....	95
The Final Coordination Approach .....	98
The Final Participants .....	101
The Lead Agency .....	104
The Coordinating Committee .....	106
The Funding Sources .....	108
The Final Service Characteristics .....	110
7 -- IMPLEMENTING THE SERVICE .....	113
Components of This Chapter .....	113
Work Plan and Schedule .....	116
Contracts .....	118
System Characteristics .....	120
Administrative and Operational Procedures .....	122
BIBLIOGRAPHY .....	131
APPENDIX A -- Examples of Elderly and Handicapped Transportation Coordination in Wisconsin	
APPENDIX B -- Materials Used in the Assessment of the Need for Coordination	
APPENDIX C -- Material Used in the Assessment of Alternatives	
APPENDIX D -- Materials Used in the Development of the Financial Plan	
APPENDIX E -- Materials for Implementing the Service	







# 1

## INTRODUCTION TO COORDINATING ELDERLY AND HANDICAPPED TRANSPORTATION SERVICES

This manual has been prepared for use by local officials and staff to assist in the development of coordinated countywide transportation services for the elderly and handicapped. It is intended for use in the coordination of both specialized and public transportation in the predominately rural counties of Wisconsin. The manual is the product of the development of coordination plans in three counties in Wisconsin: Chippewa County, Eau Claire County, and Rock. It has been developed as a "how to" reference to the generic planning process followed in the development of these plans.

Rather than present many alternative methodologies for the planning tasks, the manual presents the methodology which is most appropriate to conditions found in rural and small urban areas in Wisconsin. It is intended that the manual can be used by persons who are not transportation planners.

### WHY COORDINATION EFFORTS EMERGED

In most communities, a variety of public and private agencies and organizations provide transportation services to the elderly and handicapped. Many of these organizations provide transportation services that are limited to their specific clientele alone. These services emerged when it became evident to organizations that their elderly and handicapped clients had no other means of getting to the social services they needed. Suddenly, every organization had its own transportation system.

At the same time that the need for special transportation services has increased, the cost of meeting this demand has also increased. Accordingly, service providers (and client groups as well) have been concerned with how to make existing transportation services more efficient and effective. A closer look at existing systems has shown that many of these systems have been operating without regard to certain principles of economic efficiency and that some of these principles may be achievable through coordination. During the past five years, the concept of using coordination as a means of improving and expanding services has gained wide acceptance. Coordination of social services transportation services is a strategy with substantial intuitive appeal; thus, numerous coordination attempts have begun with very high expectations.

A great deal of investigative research has been done on coordinated systems.<sup>1</sup> From this research, both negative and positive observations can be made. For example, on the positive side:

- Coordination often results in the filling of service gaps in a community or geographic area.
- Coordination can reduce duplication and overlap involved in social service agency transportation services.
- Cost savings can accrue to some participating agencies in special forms of coordinated transportation service.

On the negative side, it is often more costly, more difficult, and more time-consuming to achieve coordination than most persons initially perceive.

And finally, some general observations. The monetary and non-monetary costs of coordination must be weighed against the expected benefits (which should be quantified in detail) in order to determine how much coordination is appropriate in a given situation. Different levels of coordination are appropriate for different situations. Coordination is a useful concept in some, but not all, instances. In order for the potential cost savings in transportation operations to be realized from coordination, significant planning and administration expenditures are necessary. Because of certain fiscal structures, volunteer contributions, or special service requirements, some agencies will never benefit from coordinating their operations.

---

<sup>1</sup>Burkhardt, J., Knapp, S. and Ramsdell, M., Coordinating Transportation Demonstration Results: Evaluation of the Office of Human Development Services Transportation Demonstration Program, prepared for the Department of Health, Education, and Welfare, February 29, 1980.

Coordination is only one of the many steps along the way to achieve a basic objective -- improving mobility. It is important not to become so wrapped up in the intricacies of implementation techniques -- like coordination -- one loses sight of this basic objective.

#### DEFINITION OF COORDINATION

The earliest study to focus on coordination defined it in three phases: 1) cooperation; 2) coordination; and 3) consolidation; reasoning that these were three essential steps in a planning continuum.<sup>2</sup> The ultimate result of cooperation and coordination could be the consolidation of all transportation services in a community or geographic area into a single unified system. Experience has shown that each of the phases mentioned above are self contained activities, implying different levels of coordination. While cooperation is integral to coordination and consolidation, a coordinated service is usually the end product -- consolidation is rare. This is because consolidation is enormously threatening to most social service agencies (who view it as a means of "taking away" their funds and program control). But consolidation often provides the greatest monetary benefits.

#### REASONS TO COORDINATE

It is very important to determine the reasons for coordination at the outset of any transportation planning effort and to communicate these reasons to all parties that will be involved. Coordinated transportation systems presumably create demonstrable benefits vis-a-vis uncoordinated, specialized, particularized transportation. Generally, the following reasons are put forth as rationales for coordinating transportation services: 1) eliminate overlap and duplication of service to the same population groups in the same geographic area; 2) fill gaps in service; 3) save money by eliminating duplication and by achieving economies of scale usually reserved for larger operations; and 4) improve and expand service. While all of these reasons are generally advanced to support coordination of transportation services, each reason applies to a greater or lesser degree depending upon: 1) geographic and demographic

---

<sup>2</sup>Institute of Public Administration, Transportation of the Elderly: State of the Art, prepared for the U.S. Department of Health, Education and Welfare, Administration on Aging, January 1975.

characteristics of the area served (e.g., urban vs. rural); 2) type of social service provided (e.g., a multi-service agency that serves several different client groups, single-purpose agency that provides a discrete service to one categorical client group); and 3) size and scope of the transportation service provided (e.g., a large fleet of vehicles serving many clients at different times of the day/week for different purposes, or one vehicle serving few clients at the same time each day for one purpose). For example, a Cerebral Palsy Center that provides transportation services to and from the facility five days a week and additional trips during the day for shopping or medical purposes for its clients, may not consider service gaps or expanded service as reasons to coordinate since the facility provides all of the (necessary) personalized transportation services to its discrete client population.

#### COORDINATION OBJECTIVES AND STRATEGIES

The difference between successful and unsuccessful coordination attempts often depends on the ability of the implementors to specifically identify and utilize appropriate coordination objectives and strategies. A clear understanding of which objectives are being pursued and which strategies are applicable is crucial to any coordinated effort.

The major types of coordination objectives are:

- focus community planning and decision-making for elderly and handicapped transportation
- reduce actual expenditures on
  - capital equipment,
  - overhead, and
  - direct costs;
- increase amount of service through
  - more tripmaking,
  - service to larger areas,
  - service to more persons, and
  - service to more population groups;
- improve use of resources (efficiency) through
  - lower unit costs,
  - improved labor productivity, and
  - improved vehicle utilization; and



• improve provision of services (effectiveness) through

- productivity and accessibility increases,
- increased service quality,
- better financial management,
- greater local political support,
- increased provision of social services, and
- greater non-transportation benefits

The choice of a particular objective is dependent on the problems that have been identified in the service area.

Each of the objectives is subject to further strategies in implementation. The coordination strategies or activities which can be used to achieve the objectives developed in the previous task can be grouped into five categories according to the function of the transportation system to be coordinated. These five categories are as follows:

1. community decision-making
2. administration
3. maintenance and parts purchasing
4. capital purchasing
5. vehicle operations

The benefit of identifying particular strategies is that it changes coordination from a general concept into a specific plan. When someone says, "I want to reduce direct costs by lowering maintenance costs," it is very easy to see if this has been accomplished or not. By making the objectives specific, they become possible to achieve.

Table 3-2 presents a list of strategies under these categories. Table 3-3 presents a comparison of objectives with strategies which might be used to achieve each objective.

#### COORDINATION IN THE STATE OF WISCONSIN

There are several coordination efforts currently underway both at the state level and at the local level in the State of Wisconsin. On the state level, there exists an Interdepartmental Transportation Coordinating Committee composed of persons from policy development and program management levels from the State Department of Transportation and the State Department of Health

and Social Services. This committee is responsible: 1) for jointly reviewing and evaluating programs under each Department which provide transportation services, and 2) for actively pursuing coordination among these programs and resources. These activities include reviewing programs, analyzing areas of potential coordination, exploring policy or legal revisions necessary to coordinate, developing of specific program procedures which encourage coordination, and developing a general plan by which information relative to transportation programs is disseminated (including joint meetings and workshops at the local level).

In accordance with a legislative mandate, the committee is conducting a joint study of current programs which provide transportation services to elderly and handicapped persons. The study will identify potential coordination needs and activities. It is anticipated that a joint report will be complete in January 1981.

In addition, in June 1979 the Department of Health and Social Services and the Department of Transportation each issued separate instructions to its recipients on the local level for the development of a transportation coordinating committee in each county. Initial meetings of these committees were to discuss and comment on coordination between transportation programs funded through the Older Americans Act (through titles III-B and III-C) and those funded through Wisconsin's Elderly and Handicapped programs -- 85.08(5) and 85.08(6)/16(b)2 -- and to include these comments in their county's 1980 Aging Plan. Based upon the results of these initial meetings in 1979, the Interdepartmental Coordinating Committee has recommended that each county establish a permanent committee for the purpose of improving their community transportation services through more systematic coordination efforts. The membership on the committee is to be composed of county agencies receiving state and Federal funds for the provision of special transportation services as well as county board members, private and public transportation providers and consumers. This concept was endorsed by the Wisconsin County Boards Association as an optional activity which would be done within the context of the existing county board structure.

Also on the local level, coordinated projects have begun to emerge. Appendix A presents some examples of coordination activities in some areas in the State.



It is intended that this manual provide practical guidance on how to develop a conceptual plan for coordinating transportation services as well as guidance and reference materials (in the appendices) for how to turn that conceptual plan into a program which can be implemented.

The first step in planning for a coordinated project is to recognize what problems are being addressed and whether coordination might be used to solve some of those problems. Chapter 2 presents a methodology for assessing the need for coordination among service providers in a county. Once (and if) it has been established that coordination is appropriate, it must be determined more specifically how the mechanism of coordination can be used to improve services. Chapter 3 presents a methodology for developing objectives, strategies, and alternative approaches to the coordination effort. Chapter 4 presents a methodology for deciding which alternative coordination approach is most beneficial.

Once a basic approach to coordination has been chosen and strategies for implementing the concept developed, it is necessary to develop a more specific financial plan including a budget, funding sources and financial accounting and reporting procedures. Chapter 5 presents the steps involved in the development of a financial plan.

Chapter 6 includes guidance on how to finalize the decisions made during the planning stage on the organizational/management approach to the coordinated project. This chapter describes the process by which the planning process can be linked to implementation activities. Chapter 7 specifies the activities required to implement the coordinated project.

Figure 1-1 illustrates, in a general sequence of seven steps, the process described above to plan and implement a coordinated transportation system, starting with the assessment of the need to coordinate in your area and ending with implementation activities. This figure reappears at the beginning of each chapter to help the reader see each activity in its place as part of the overall planning and decision-making process. The particular step being discussed in each chapter is highlighted on the figure beginning the chapter.

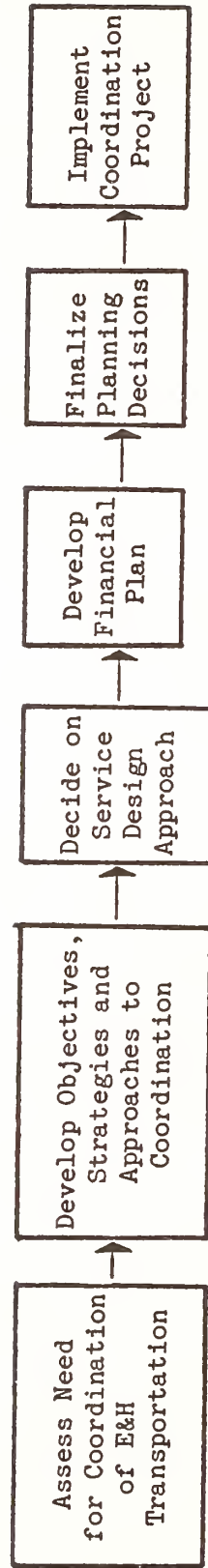
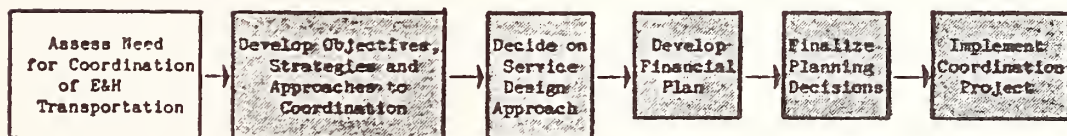


Figure 1-1: PLANNING PROCESS FOR COORDINATION OF ELDERLY AND HANDICAPPED TRANSPORTATION

---

ASSESSING THE NEED FOR COORDINATION



# 2

## ASSESSING THE NEED FOR COORDINATION

### COMPONENTS OF THIS CHAPTER

#### Purpose

The purpose of this chapter is to identify the planning steps involved in assessing the need for coordination of elderly and handicapped transportation services in a county. It must first be recognized that coordination is but one of many tools that may be used to improve or expand services in a county; while often (but not always) helpful, coordination without other concurrent improvements will seldom be effective. Viewed from this perspective, it is possible to determine whether and how coordination could be used.

#### Content of the Chapter

The basic process of assessing the need for coordination is as follows:

1. Establish a Study Advisory Committee;
2. Estimate the need for elderly and handicapped transportation services in the county;
3. Identify and inventory the transportation services currently available to the elderly and handicapped in the county; and
4. Analyze the need for coordination in the county by determining whether the efficiency and effectiveness of current services can be improved through coordination.

Each of these basic steps in the process are discussed in turn. Figure 2-1 presents a chart of the flow of activities required in this process.

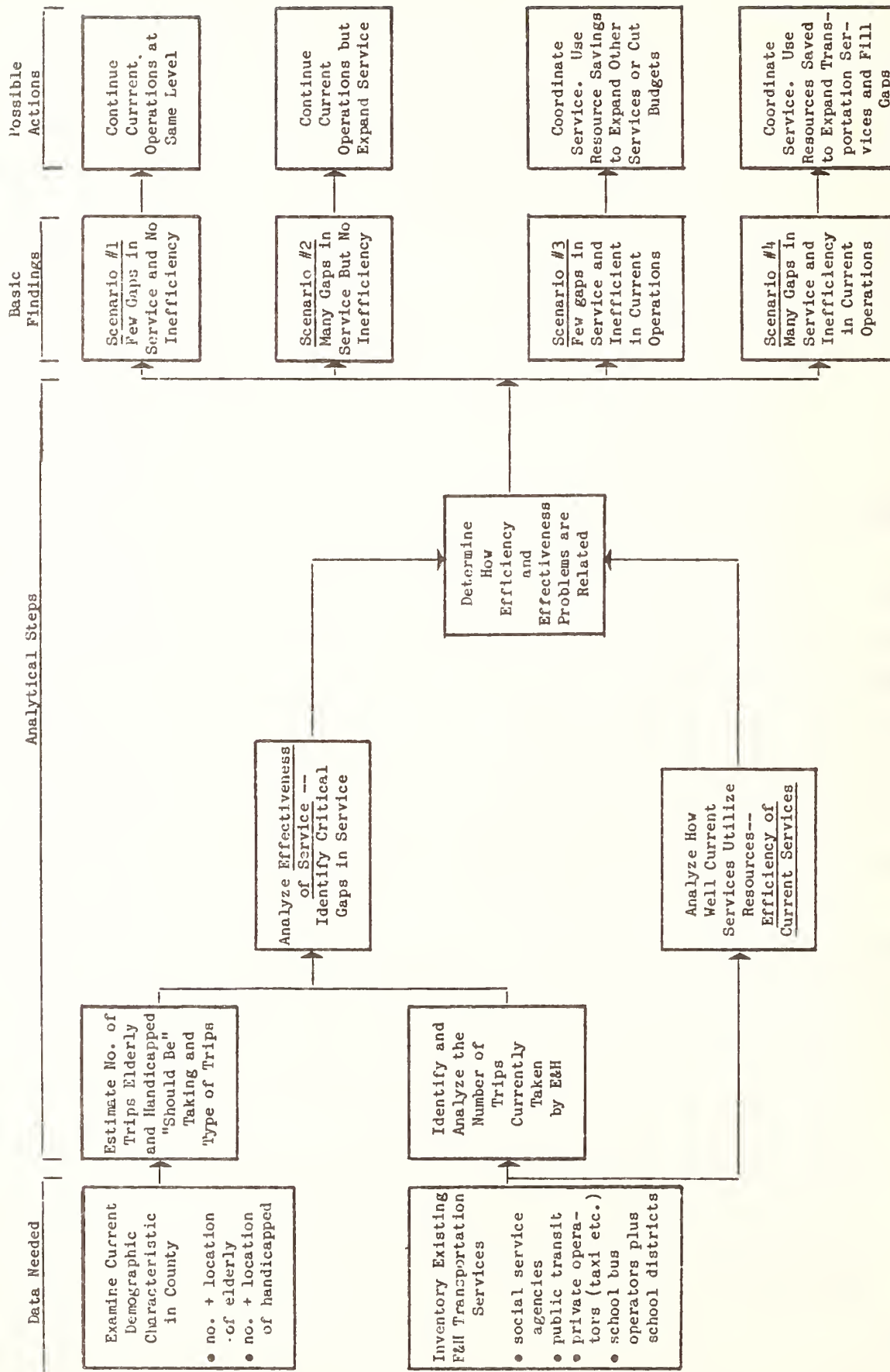


Figure 2-1: HOW TO ASSESS THE NEED FOR COORDINATION



## Basic Tasks

There are three basic tasks in assessing the need for coordination in your county: estimating the need for elderly and handicapped transportation in the county, developing an inventory of current services, and analyzing those services to determine, whether they meet the needs identified and whether their efficiency could be improved by coordinating them. The steps involved in these tasks include:

1. ESTABLISH A STUDY ADVISORY COMMITTEE
2. ASSESS THE NEED FOR ELDERLY AND HANDICAPPED TRANSPORTATION
  - a. Estimate the number of elderly and handicapped persons (by severity of handicap) in the county by town, village, and city.
  - b. Estimate the number of trips "needed" by each user group in each geographic area.
  - c. Estimate the current number of trips the elderly and handicapped take on alternative modes (bus, taxi, auto).
3. IDENTIFY AND INVENTORY TRANSPORTATION SERVICES CURRENTLY AVAILABLE TO THE ELDERLY AND HANDICAPPED
  - a. Identify agencies and organizations which provide, purchase, or reimburse for transportation services to the elderly and handicapped.
  - b. Collect information from these agencies on their transportation systems and services.
4. ANALYZE THE NEED FOR COORDINATION OF TRANSPORTATION SERVICES
  - a. Compute efficiency measures for current specialized transportation services.
  - b. Analyze those efficiency measures to determine whether coordination is a potential mechanism to improve efficiency.
  - c. From task 3.b, estimate number of trips provided on specialized transportation to target populations by urban/rural and type of trips (general purpose/agency related).
  - d. Identify critical unmet needs by taking the number of trips "needed" (2.b) and subtract out the number of trips provided on other modes (2.c), and on specialized transportation. Set priorities on these critical gaps in service.
  - f. Determine whether increases in efficiency due to coordination will result in cost savings to allow for increases in the service, effectiveness of the service.

## Products

The products resulting from the process described in this chapter are especially critical in the planning process since they are used in the next planning tasks described in Chapter 3. These products include:

- a technical study advisory committee;
- an estimate of the number of elderly and handicapped in the county by geographical area;
- an estimate of the number of trips the elderly and handicapped "need" to take;
- an estimate of the number of trips currently provided to the elderly and handicapped on specialized transportation;
- an estimate of the number of trips the elderly and handicapped take on other modes (autos, buses, taxis);
- an estimate of the "unmet needs" or critical gaps in transportation services to the elderly and handicapped in the county;
- an inventory of services provided by agencies and organizations providing transportation services to the elderly and handicapped (including resources utilized);
- a calculation of efficiency measures for current operators and purchasers of service and an analysis of the potential for coordination to increase the efficiency of those services;
- an analysis of the potential for coordination to improve the effectiveness of current services;
- the base of information necessary to develop objectives for a coordination effort in the county.

The purpose of this task is to create a study advisory committee to assist in the planning of the project.

The first step in planning for a coordinated project should be to establish an advisory committee to assist in the planning process. The advisory committee should include representatives of human service agencies which provide transportation, public transportation providers, private transportation providers, county board members, other local financial supporters of transportation, and elderly and handicapped consumers. It is suggested that about 12 persons be asked to serve on the committee (no more than 20 persons).

The advisory committee should play a role in every part of the planning process (if only to review and comment as decisions are made). An advisory committee can be used:

- to keep significant actors in the community informed at all times,
- to obtain the widest range of comments possible on the work performed during planning,
- to ensure that a transition can actually be made from the "paper design" to a real-work operational system, and
- to guarantee that the system implemented has the greatest possible chance of success.

The product of this task is a list of members for a technical study advisory committee.

This step results in an estimate of the amount of transportation services needed by the elderly and handicapped. This information is required in order to determine whether there are critical unmet needs or gaps in services to these groups.

The first step in assessing the need for coordination in an area is to estimate the need for specialized transportation services to the elderly and handicapped. This process will result in an estimate of the number of trips that the elderly and handicapped "need" to be supplied by specialized transportation (as discussed in a subsequent section, this estimate of need should be distinguished from the concept of demand). The primary purpose of developing this estimate is to determine whether the overall transportation needs of the elderly and handicapped are being met. However, since it may not be possible to fill all the transportation needs of these target groups, the secondary purpose of this exercise is to identify critical gaps in service for particular target populations, geographic locations or types of trips. "Needs" typically refer to a deficiency between the existing situation and some acceptable or ideal situation.

#### The Difference Between Estimates of "Need" and "Demand"

Quite simply, demand is a fairly exact concept and need tends to be non-specific.<sup>1,2</sup> Demand techniques produce specific numbers -- for example, the number of trips that would be taken under given circumstances. Discussions of need are seldom specific and, if so, almost never focus on the number of trips to be taken.<sup>3</sup> In fact, the best estimates of need are those that describe specific numbers of persons, not trips.

The appropriate uses of these estimates also differ. Demand techniques are useful in the planning process that leads to the specific allocation of resources.

---

<sup>1</sup>Wayne A. Kimmel, Needs Assessment: A Critical Perspective, prepared for U.S. Department of Health, Education, and Welfare, Washington, D.C.: GPO, December 1977.

<sup>2</sup>Kenneth E. Boulding, "The Concept of Need for Health Services," Milbank Memorial Fund Quarterly, 44:4, Pt. 2, October 1966.

<sup>3</sup>For example, see L. Hoel, et al., Latent Demand for Urban Transportation, Carnegie Mellon University, Pittsburg, 1970; and Oscar A. Ornati, Transportation Needs of the Poor, Praeger, New York, 1969.



Needs statements are useful for generating political support and for establishing priorities among potential service areas. Demand estimates will be made for the coordinated projects after alternative approaches are developed, as part of the assessment process.

Discrepancies between measurements of needs and demands for transportation services arise mainly from the failure of the analyst estimating needs to consider the role of service attributes in generating travel demands. For example, the elderly may need transportation services because of physical handicaps. However, some prefer scheduled service, while others prefer "on-call" services. If scheduled service is provided, then the elderly preferring "on-call" services will not participate even if they need the service because they find that the schedules are not appropriate for their use. Thus, while need for transportation services is somewhat physically and psychologically related, demand becomes the amount of transportation services the population will consume as a function of prices, service attributes, financial resources, and psychological wants. The demand functions yield estimates of quantities of transportation services to be consumed, while needs become the basis for normative assessments of shortages and surplus.

For example, since the elderly and handicapped are more likely to need more transportation services than they are now receiving, areas with unusually high proportions of such persons are more likely to experience transportation problems. Thus, any kind of a scheme that ranks (or even graphically represents) concentrations of such persons can show which areas have the highest priority. The high priority areas that already have good transportation services can be eliminated, leaving areas that need improved services because of their current demographic and service characteristics.

Note that this application has not identified how many trips are needed or even how many persons need trips; instead it merely provides a way of saying where the problem is likely to be worse than other places. This is an appropriate use of needs analysis.<sup>4</sup>

The three steps involved in this process are:

1. estimating the number of elderly and handicapped persons in the area;

---

<sup>4</sup>For example, see Governor's Task Force on Rural Transportation, Rural Transportation in Pennsylvania: Problems and Prospects, Harrisburg, May 15, 1974, pp. 5-6.

2. estimating the total number of trips the elderly and handicapped "need" to take;
3. using estimates of the amount of service currently provided to the elderly and handicapped, estimate the "unmet need" for services that exists.

### Estimating the Number of Elderly and Handicapped

Updated census data on the total population in the towns, villages and cities in Wisconsin is available from the Wisconsin State Department of Administration Demographic Services Center. The official population estimates for 1979 are included in Appendix B, and these figures are updated annually by that Department.

#### Elderly

Estimating the number of elderly persons who are 65 years old and over is fairly straightforward. Estimates can be made using data available on a County basis from the Bureau of Health Statistics of the State Division of Health (see Appendix B) and distributing this proportionately to towns, villages and cities based upon total populations in those areas. However, in many cases it will be more appropriate to use an estimate of the number of persons 60 years and older. This estimate is more difficult to make since this data is available only on a County basis, from the Bureau on Aging (also included in Appendix B). To estimate the number of persons 60 years old and over broken-down by town, village and city involves estimating the number of elderly between 60-64 years old on a township basis (using an overall county estimate for this age group and distributing this by town proportionate to the population 65 years and over in each town) and adding this number to the number of persons 65 years and over in each town.

#### The Transportation Handicapped

While elderly and handicapped persons generally have more transportation problems than non-elderly and non-handicapped persons, not all elderly and handicapped have transportation problems. In fact, it has been estimated that



approximately 65% of the elderly do not have any transportation problems. Hence, for specific transportation planning purposes, it is more relevant to use estimates of the number of persons who are "transportation handicapped".

The transportation handicapped are those persons, who, by reason of age, handicap, income or other condition cannot make use of the transportation facilities available to the general public. It has become apparent that there are substantial variations in mobility limitations among members of the transportation handicapped, with substantially different trip rates and vehicular requirements for members of the various subgroups. Among the classification schemes that have been proposed are the following:

- Crain and Associates:<sup>5</sup>
  - able-bodied
  - moderately handicapped
  - severely handicapped
- Grey Advertising:<sup>6</sup> difficulty using public transportation as compared to a person with no physical handicap:
  - as easy to use
  - a little more difficult to use
  - a lot more difficult to use
  - not able to use at all
- Southwestern Pennsylvania Regional Planning Commission:<sup>7</sup>
  - ambulatory
  - semi-ambulatory and sensory and other handicapped persons
  - escort-dependent ambulatory
  - non-ambulatory
  - home bound

The first classification scheme is the most useful<sup>8</sup> in many ways because of the degree of detail available and its ease of application. Under this scheme,

"the definition of functionally transportation handicapped was based on the individual's ability to perform the following functions connected with the use of conventional transit:

---

<sup>5</sup>Crain and Associates, Incidence Rates and Travel Characteristics of the Transportation Handicapped in Portland, Oregon, April 1977.

<sup>6</sup>The Grey Marketing and Research Department, Incidence Counts of Transportation Handicapped People, March 1977.

<sup>7</sup>Southwestern Pennsylvania Regional Planning Commission, Planning Documentation Report: Transportation Planning for Handicapped and Elderly Persons in the Southwestern Pennsylvania Region, Pittsburgh, November 1978.

<sup>8</sup>This classification scheme is most useful, since the resulting data allow you to estimate not only the number of transportation handicapped persons but also the number of trips taken by each.

- a. Get on or off the public transit bus.
- b. Go (walk) more than two or three blocks.
- c. Wait, standing for more than ten minutes.
- d. Keep balance while riding on a moving transit vehicle.
- e. Move in crowds.
- f. Read information signs (not including foreign language problems).
- g. Grasp coins, tickets or handles.
- h. Understand and follow transit directions (not including foreign language problems).

The interviewees were asked if they could perform each activity "easily", "with some difficulty", "with severe difficulty", or "not at all". After these interviews, the respondents were classified as follows:

- a. Able-Bodied. Those who claimed "some difficulty" on no more than one function, saying all the rest could be done "easily". Note that able-bodied as a definition still includes those with some difficulty with one of the functions.
- b. Moderately Handicapped. Those who claimed "severe difficulty" on no more than one function, saying that all the rest could be done "easily" or "with some difficulty".
- c. Severely Handicapped. All the rest, i.e., those who claimed they "could not do" any function or had "severe difficulty" with more than one.<sup>9</sup>

The number of persons who are moderately or severely transportation handicapped can be calculated for each town in the county by using the incidence rates for these handicaps from the Portland study. These incidence rates, broken down by age category, are shown in Table 2-1.

Table 2-1

INCIDENCE RATES OF TRANSPORTATION HANDICAPS  
BY AGE AND SEVERITY OF HANDICAP

Age	Moderately Transportation Handicapped	Severely Transportation Handicapped
10-59	.005	.0107
60-64	.0322	.0344
65+	.114	.1818

Source: Definition and Travel Characteristics of the Transportation Handicapped in the CRAG Region, p. 45.

<sup>9</sup>Special Transportation Services Task Force, Definition and Travel Characteristics of the Transportation Handicapped in the CRAG Region, Columbia Region Association of Governments, Portland, Oregon, September 1977.

Table 2-3 presents an example of the transportation handicapped by towns using the classification scheme. When looking at the overall number of elderly and handicapped in an area, it is important not to overlap elderly with handicapped counting some elderly twice (once as elderly and once as handicapped). Table 2-4 presents an example of the estimates for both elderly and handicapped by town in a hypothetical county in Wisconsin.

#### Estimating the Number of Trips Needed by The Elderly and Handicapped

The estimate of the overall travel needs for the elderly and handicapped is expressed in terms of the number of one way trips per month. An estimated trip-making rate for the able-bodied elderly and the transportation handicapped is presented in Table 2-2.

Table 2-2

#### TRIP RATE PER MONTH BY USER TYPE (one-way trips)

Target Population	Trip Rate/Month
Able-Bodied Elderly	29.8
Moderately Handicapped	25.6
Severely Handicapped	17.0

Source: Daily trip rate in Crain and Associates, Incidence Rates and Travel Characteristics of the Transportation Handicapped in Portland, Oregon, April 1977 (multiplied by 21.3 days per month).

The monthly trip rate is used to estimate need in the county by multiplying it times the number of persons in that category and coming up with the number of trips needed per month. Table 2-5 presents an example of this estimation in one county.

#### Estimating Unmet Needs in the County

In the previous section the number of trips needed by the elderly and handicapped was estimated. To determine whether the service is available for the elderly and handicapped to take these trips (whether unmet needs exist), it is important to consider the availability of other modes. Based upon data in other areas, it is estimated that approximately 84% of the trips taken by the able-bodied elderly are made by either driving themselves or by being driven by a

Table 2-3

EXAMPLE  
ESTIMATED 1979 DEMOGRAPHIC STATISTICS  
IN "WISCONSIN COUNTY"

Locations	Total Estimated Population 1979 <sup>1</sup>	Elderly <sup>2</sup> 60+		Transportation Handicapped <sup>3</sup>		Total Elderly and Handicapped
		#	%	Elderly 60+	Non-Elderly	
TOWNS						
1. Avon	600	78	13.0	28	9	87
2. Beloit	8,403	1,036	12.3	375	115	1,151
3. Bradford	1,131	153	13.5	55	15	168
4. Center	922	115	12.5	42	13	128
5. Clinton	1,050	112	10.7	40	15	127
6. Fulton	2,545	347	13.6	126	35	382
7. Harmony	2,084	205	9.8	74	29	234
8. Janesville	2,776	582	21.3	215	34	616
9. Johnstown	886	91	10.2	33	13	104
10. La Prairie	1,127	123	10.9	45	16	139
11. Lima	1,218	138	11.3	51	17	155
12. Magnolia	795	106	13.3	38	10	116
VILLAGES						
13. Clinton	1,626	306	18.8	111	21	327
14. Footville	744	99	13.3	35	10	109
15. Orfordville	1,146	200	17.4	72	15	215
CITIES						
16. Beloit	34,711	5,046	14.5	1,829	465	5,511
17. Egerton	4,580	808	17.6	293	85	893
18. Evansville	3,229	557	17.2	201	42	599
TOTAL	69,573	10,102	14.5	3,663	959	11,061

Sources:

<sup>1</sup>Official Population Estimates for 1979, Wisconsin Department of Administration, Madison, Wisconsin, October 1979.

<sup>2</sup>This was calculated by 1) taking the actual % of elderly over 65 years in 1970 census and applying this percentage to the 1979 population data, 2) taking an estimate of the overall % of persons from 60-64 in 1980 and distributing these persons to each town or city proportionally to their population and 3) adding together the number of persons 65 years and the number 60-64 years. The source for the percentage of persons from 60-64 years in 1980 is the populations projections prepared by the Wisconsin Bureau on Aging, May 1979.

<sup>3</sup>Crain and Associates, Incidence Rates and Travel Characteristics of the Transportation Handicapped in Portland Oregon, April 1977.



Table 2-4

EXAMPLE  
ESTIMATES OF THE NUMBER OF PERSONS WHO ARE  
TRANSPORTATION HANDICAPPED IN "WISCONSIN COUNTY"

Locations	Moderately Transportation Handicapped <sup>1</sup>		Severely Transportation Handicapped <sup>2</sup>		TOTAL
	Non-Elderly	Elderly <sup>3</sup>	Non-Elderly	Elderly <sup>3</sup>	
TOWNS					
1. Avon	3	11	6	17	37
2. Beloit	36	151	79	224	490
3. Bradford	5	22	10	33	70
4. Center	4	17	9	25	55
5. Clinton	5	16	10	24	55
6. Fulton	11	51	24	75	161
7. Harmony	9	30	20	44	103
8. Janesville	11	87	23	128	249
9. Johnstown	4	13	9	20	46
10. La Prairie	5	18	11	27	61
11. Lima	5	21	12	30	68
12. Magnolia	3	15	7	23	48
VILLAGES					
13. Clinton	7	45	14	66	132
14. Footville	3	14	7	21	45
15. Orfordville	5	29	10	43	87
CITIES					
16. Beloit	148	738	317	1,091	2,294
17. Egerton	27	118	58	175	378
18. Evansville	13	81	29	120	243
TOTAL	304	1,477	655	2,186	4,622

<sup>1</sup>Moderately handicapped means that an individual has severe difficulty in performing one of eight transit related functions (i.e., getting on and off the bus, walking 2 or 3 blocks).

<sup>2</sup>Severely handicapped means that an individual cannot perform one of the eight transit-related functions or has severe difficulty with more than one.

<sup>3</sup>Over 60 years old.

relative or friend. Approximately 76% of the trips taken by for the moderately handicapped and 81% of the trips taken by the severely handicapped are made in this manner.<sup>10</sup> This leaves approximately 16%, 24% and 19% of trip needs of the able-bodied elderly, the moderately handicapped and the severely handicapped unmet by the auto mode. The number of trips not being met by automobile can be estimated by multiplying 16%, 24%, and 19% of the total need for transportation services by the able-bodied elderly, severely handicapped, and moderately handicapped, respectively.

It is important to consider that in areas where regular bus service or taxi service is available, some of the trips required by the elderly and handicapped can be met by these modes. Approximately 97% of the able-bodied elderly, 87% of the moderately handicapped and 31% of the severely handicapped can ride regular buses. Approximately 98% of the able-bodied elderly, 99% of the moderately handicapped and 91% of the severely handicapped can use taxis.<sup>11</sup> When such

Table 2-5

ESTIMATED MONTHLY ONE-WAY TRIPS DEMANDED BY USER TYPE  
FOR A "WISCONSIN COUNTY"

Type of Person		Number of Persons	Trip Rate/ Month	Trips/ Month
Able-Bodied Elderly		6,439	29.8	191,882
Moderately Handicapped	Elderly	1,477	25.6	37,811
	Non-Elderly	304	25.6	7,782
Severely Handicapped	Elderly	2,186	17.0	37,162
	Non-Elderly	655	17.0	11,135
TOTAL		11,061	25.8 (avg.)	285,772

Daily trip rate in Crain and Associates, Incidence Rates and Travel Characteristics of the Transportation Handicapped in Portland, Oregon, April 1977, multiplied by 21.3 days per month.

<sup>10</sup>Crain and Associates, Incidence Rates and Travel Characteristics of the Transportation Handicapped in Portland, Oregon, April 1977.

<sup>11</sup>Ibid.

services are available, it is appropriate to determine how many trips may be taken on these modes and subtract the need met from the total trips needed. However, it should be cautioned that with the provision of taxi services, cost must also be considered. For many individuals, especially the elderly and handicapped, the cost of a taxi prohibits its use unless reduced fare or user-side subsidy programs are used.

#### Procedures for Identifying Additional Trips Needed

In this step, an analysis is performed of the potential number of trips needed by the elderly and handicapped after other modes are considered. Such an analysis can be performed by using a generalized model:

$$NEED_U = NEED_T - TRIPS_A - TRIPS_B - (TRIPSSAP + TRIPSSAG + TRIPSPG)$$

where

$NEED_U$  = Estimated Additional Trips Needed (unmet needs)  
 $NEED_T$  = Total Estimated Trips Needed  
 $TRIPS_A$  = Estimated Number of Trips Now Taken in Autos  
 $TRIPS_B$  = Estimated Number of Trips Now Taken on Regular Public Transit  
 $TRIPSSAP$  = Number of Trips Provided to Agency Clients to Agency Programs Only  
 $TRIPSSAG$  = Number of Trips Provided to Agency Clients Only but for Any Purpose  
 $TRIPSSG$  = Number of Trips Provided on Paratransit to General Elderly and Handicapped Population

Note:  $TRIPSSAP$  and/or  $TRIPSSAG$  can equal 0 if data suggest that these services are provided to only a few persons on a very repetitive basis and that inclusion of a large number would misrepresent conditions in the county being analyzed.

#### Identifying Additional Trips Needed by Type of Individual

Table 2-6 presents a matrix which can be used as an analysis tool to record the information used in the above model disaggregated by user groups. Table 2-7 outlines the steps required to fill in these matrices.



Table 2-6  
NUMBER OF ONE-WAY GENERAL PURPOSE TRIPS NEEDED PER MONTH BY THE  
ELDERLY AND HANDICAPPED IN "WISCONSIN COUNTY"

	Trips by Able-Bodied Elderly	Trips by the Moderately Handicapped		Trips by the Severely Handicapped		TOTAL TRIPS
		Elderly	Non-Elderly	Elderly	Non-Elderly	
A. Estimated Total Number of Trips Needed	119,882	37,811	7,782	37,162	11,135	385,772
B. Estimated Number of Trips Not Met by Auto Mode	19,181	9,075	1,868	7,061	2,116	39,301
C. Estimated Potential Number of Trips on Regular Bus	11,164	4,824	975	1,313	394	18,670
D. Number of Trips by Social Service Agencies	401	157	43	209	97	2,333
E. Total Additional Trips Needed ( unmet need )	7,616	4,094	850	5,539	1,625	19,724

Table 2-7

PROCEDURE FOR ESTIMATING ADDITIONAL TRIPS  
NEEDED BY TYPE OF INDIVIDUAL

Step 1. Start with an estimate of total trips "needed" for services disaggregated by user group. (This information was developed in an earlier step; see Table 2.5). Record this information on the matrix (Row A).

Step 2. Estimate the potential number of one-way trips which are not provided by the auto mode. This is done by taking a percentage of total trips needed as follows:

<u>User Group</u>	<u>Estimated % of Needed Trips Not Met by Auto</u>
Able-Bodied Elderly	16%
Moderately Handicapped	24%
Severely Handicapped	19%

Record this on the matrix (Row B).

Step 3. Estimate the number of one-way trips which are probably provided by the existing regular bus service. (If no bus service exists now, then this number equals zero.) This is done by taking a percentage of the need not met by the auto mode (from Row B above) as follows:

<u>User Group</u>	<u>Estimated % of Needed Trips Met by Bus</u>
Able-Bodied Elderly	97%
Moderately Handicapped	87%
Severely Handicapped	31%

Record this on the matrix (Row C).

Step 4. Record on the matrix the number of one-way trips provided by social service agency transportation (Row D). This information is obtained from the inventory of services performed specifically for each county.

Step 5. Determine the total additional trips needed (unmet need) by taking estimated number of trips not met by auto (Row B) and subtracting the estimate of the number of trips on the bus (Row C) and the number of trips provided by social service agencies (Row D). Record this number on the matrix (Row E).

Table 2-8 presents an analysis matrix similar to Table 2-6 but with the information disaggregated further by urban and rural areas. The process for developing the information in each cell of the matrix is the same as used for Table 2-6. This time, each step requires that the information used is separated into its rural and urban components.

The overall end product of this task is an estimate of the "unmet" needs or critical gaps in transportation services to the elderly and handicapped in this county. Other products include an estimate of the number of elderly and handicapped persons in the county, an estimate of the number of trips the elderly and handicapped "need" to take and an estimate of the number of trips currently provided to the elderly and handicapped (on various modes).

Table 2-8

NUMBER OF ONE-WAY GENERAL PURPOSE TRIPS NEEDED PER MONTH BY  
URBAN VERSUS RURAL AREAS IN "WISCONSIN COUNTY"

		Able-Bodied Elderly	Moderately Handicapped		Severely Handicapped		TOTAL TRIPS
			Elderly	Non-Elderly	Elderly	Non-Elderly	
A. Estimated Total Number of Trips Needed	urban	71,929	22,729	4,669	22,297	6,681	231,465
	rural	47,953	15,152	3,113	14,865	4,454	154,307
B. Estimated Number of Trips Not Met by Auto Mode	urban	11,509	5,445	1,121	4,237	1,270	23,582
	rural	7,672	3,630	747	2,824	846	15,719
C. Estimated Potential Number of Trips on Regular Bus	urban	11,164	4,824	975	1,313	394	18,670
	rural	0	0	0	0	0	0
D. Number of Trips by Social Service Agencies	urban	301	117	30	189	90	727
	rural	100	40	13	20	7	180
E. Total Additional Trips Needed ( unmet need)	urban	44	504	116	2,735	786	4,185
	rural	7,572	3,590	734	2,804	839	15,539

## AN INVENTORY OF THE TRANSPORTATION SERVICES CURRENTLY AVAILABLE TO THE ELDERLY AND HANDICAPPED

This step results in the data required to analyze current services to determine 1) whether these services could be operated more efficiently in a coordinated manner and 2) whether current services effectively meet the transportation needs of the elderly and handicapped in the area.

The purpose of this task is to collect data that are sufficiently accurate and complete to develop a coordination plan. The collection of accurate data is a major issue in coordinating transportation systems. The following discussion describes some common problems encountered in collecting the major data elements required in order to make decisions about the level of coordination possible, size of the system to be developed, costs involved with start-up and operations, and viable resources available.

### Vehicles

Data should include the number, seating capacity, age and condition of vehicles and whether the vehicles are owned or leased. The age and condition of the vehicles are not usually considered in service inventories, but experience with the OHDS transportation demonstrations<sup>12</sup> indicates that exclusion of such information can be a mistake. After starting their operations, some of these demonstration projects found that many of the vehicles provided by participating agencies were old and in poor condition. Extensive repairs were required, and maintenance costs were higher than anticipated. Vehicles which conform to state school bus or "Human Service Vehicle" regulations for handicapped transportation should also be identified.

### Drivers

Data should include the number of paid, number of full-time/part-time, and number of volunteer drivers. When coordinating with some social service agencies, the part-time driver issue becomes important. Often, a service facility will utilize staff paid for other functions (aides, teachers, caseworkers, counselors) as part-time drivers of their vehicles. If the coordinated transportation system is such that it is unable to utilize these personnel, the agency may not wish to participate, as it may not require the services of a

---

<sup>12</sup>Burkhardt, J., Knapp, S. and Ramsdell, M., Coordination Transportation Demonstration Results, op. cit.



full-time teacher, aide, case worker, etc. Since driving would no longer be required as part of their job, the agency would be forced to terminate or reassign these persons. In a Clearinghouse or Broker type of coordination (where each agency continues to operate its own service but shares space, rides and time with other agencies by coordinating service through a central dispatcher) this would not present a problem; it would constitute a barrier to a consolidated system, however. On the other hand, many social service agencies need far more professional staff than they can afford and eliminating a non-professional task (i.e., driving) may free the staff to devote more time to the professional functions for which they were hired.

#### Ridership and Trip Characteristics

Although this type of data is necessary to plan a coordinated system in order to determine the types of clients to be served, where they go, and how often, it should be recognized that social service agencies that provide transportation services may not keep complete records of ridership and trip characteristics of their clients. For example, a study of social service agency transportation conducted by the University of Texas at Austin<sup>13</sup> found that most agencies did not keep detailed or complete records of trip characteristics of their clients because such information was not considered relevant to the major social services function of the agency. When such data were available, classifications were poorly detailed and "rarely were in a form that had meaning for traditional transit planning." The study found that while many social service agencies kept records on total passenger trips, they could not determine whether the aggregate represented few passengers riding many times or a large number of passengers riding infrequently. Most social service agencies did not record the time of day the trips was taken, physical characteristics of passengers, and the extent to which riders required "hands-on" service (e.g., wheelchair tie-downs, fastening of seat belts, or assistance in entering or leaving the vehicle).

It appears that the Texas study is representative of national social service transportation record-keeping. For example, background data on trip characteristics provided by each of the OHDS transportation demonstration grantees (through their participating agencies) was so inadequate that extra time had to be spent with each agency, in order to obtain data that will be useful in the evaluation analysis.

---

<sup>13</sup>Social Service Agencies Transportation Services in Texas: The Potential for Other Paratransit Modes - University of Texas at Austin, for the Cooperative Highway Research Program (Texas State Department of Highways & Public Transportation and the U.S. Urban Mass Transportation Administration, DOT), 1977.

## Costs

The Texas study found that, "When reporting their costs, most social service agencies excluded any expenses born externally. Generally excluded were direct expenses such as vehicle purchase and driver salary if the vehicle was donated or obtained through a grant and the driver was already a full-time employee. Hidden subsidies, such as free garaging or free maintenance or volunteer drivers, were often completely ignored. The majority of social service agencies directly providing transportation services to their clients did not depreciate their vehicles if they had obtained them for little or no cost. Administrative expenses and telephones were rarely calculated because they were part of the agency's total budget. Fuel and maintenance costs were often obscured by inaccurate or inadequate bookkeeping."<sup>14</sup> These findings are borne out by experience with the OHDS transportation demonstration grantees (and their participating agencies), transportation training and technical assistance efforts to Area Agencies on Aging on behalf of the Commonwealth of Virginia, and our technical assistance work with the Institute of Public Administration.

Since accurate cost data are essential to the planning of a coordinated system, this issue must be dealt with at the onset of the process. It is possible to work with the agencies to obtain acceptably accurate cost data but much additional time and effort will probably be required. Another point should be made about cost data. Because social service agencies do not always know their true transportation costs, they may not recognize the cost-savings that could accrue to them through coordination. Thus, the cost-savings argument may not be an effective means of persuading agencies to participate in a coordination effort, (unless full costs are made explicit at the outset.)

### Identifying Agencies or Organizations which Provide Transportation Services to The Elderly and Handicapped

In this task identification is made of agencies or organizations which provide transportation service to the elderly and handicapped in the area. These will include the following types:

#### 1. Human Service Agencies,

- those that operate vehicles
- those that purchase service
- those that use volunteers and staff to transport clients
- those that reimburse or subsidize clients (including user side subsidy or shared ride taxi programs)

---

<sup>14</sup>Ibid



2. Public Transit Authorities and Operators,
3. Private bus operators plus taxi cab companies,
4. Taxi cab companies, and
5. School districts and private school bus operators.

Identification of agencies and organizations can begin with existing human service agency directories which have been already prepared. In particular, if an area has applied for a grant under the State Elderly and Handicapped Transportation Program 85.08(5), an inventory of transportation service will have been prepared as part of the 1979 grant application.

It will be necessary to update this list and check for completeness by distributing it to members of the advisory committee and other interested persons for comment.

#### Collecting Data on Existing Transportation Service

The first step in this data collection effort is development of the data collection methodology; the identification of what data is needed and from whom. Data on special transportation services will be collected from human service agencies, public transportation operators and private transportation providers. This data should include all information needed to analyze:

- Need for Coordination: This is an analysis of the transportation system being operated (i.e., operations, management, funding), and the services (demand responsive, fixed route) being provided to determine 1) whether there are duplications and/or gaps in transportation service to human service agency clients and elderly and handicapped; 2) whether efficiency and effectiveness of the transportation services are low and could be improved; and 3) if there is a need for coordination, and, if so, the concept or concepts most applicable.
- Expected Benefits of Coordination: This is an analysis of the benefits that could be expected by implementing various forms of coordination. These include increasing operational efficiency, user service and the ease of project implementation.

Following is a list of the data the project participants will need to collect:

From Transportation Providers: Data is needed in the following areas from all agencies, authorities, or providers which actually operate some form of transportation service.

- a. Service characteristics of transit systems (all those service characteristics directly related to users)
  - type of service (door-to-door; door-thru-door, etc.),
  - method of user activation (demand responsive, fixed schedule),
  - assistance on vehicles,
  - reservation time,
  - routes,
  - headways (if fixed routes),
  - special equipment on vehicles,
  - hours of operation,
  - fares.
- b. Operational characteristics
  - number of vehicles, condition, age or number of miles on each,
  - radio dispatched,
  - vehicle miles,
  - passengers carried (disaggregated by travel handicap),
  - number of personnel - paid only for transportation, paid staff used primarily for other duties, or volunteer.

From Provider, Purchaser or Reimbursement Agencies: Data is needed from every agency, authority or provider interviewed regardless of whether they operate their own service, purchase services from another entity for their clients, or reimburse their clients for the cost of their transportation. This includes:

- a. Agency characteristics
  - number and type of clients,
  - number of clients provided transportation,
  - number of passenger trips needed to adequately serve clients,
  - restrictions on whom agency can serve,
  - willingness of agency to coordinate transportation service and/or purchase services from a coordinated project.
- b. Administrative characteristics
  - personnel,
  - administrative procedures
- c. Funding characteristics
  - transportation
  - transportation administrative costs,
  - source and amount of transportation funds (State, Federal, and local); and
  - agency perceptions of restrictions on use of these funds.

Once it has been established what data you need from whom, it can be decided how to collect it. While the data collection methodology may involve more than one technique (e.g., mailouts and phone surveys) it is more effective if the majority of the information be collected either in person or by telephone interviews.

While one agency will probably direct the majority of work on this task, the technical advisory committee should be actively involved in the collection of data from human service agencies. This involvement accomplishes two things:

1. members from the region are actively involved and will feel more of a vested interest in the final plan; and
2. members of this group could effectively market the plan and develop relations with major providers while performing personal interviews.

Again, some of the information will be available from current county inventories. In addition, some of this information is already available from the Wisconsin Departments of Transportation and Health and Social Services. Information is available from the Wisconsin DOT statewide survey of elderly and handicapped transportation providers performed in 1976. It may be possible to also utilize information from the quarterly reports supplied by agencies receiving State elderly and handicapped transportation funds (which include information on passenger trips and costs.) Data collection forms for the various agencies and organizations are included in Appendix B.

The product produced in this task is a listing and inventory of transportation services currently provided to the elderly and handicapped in the county.

The purpose of this step is to determine whether coordination is needed in the county as a strategy for improving transportation services and whether benefits will result.

Coordination is being considered as a means of improving the efficiency and effectiveness of current services with the hope that this will allow for an expansion of services or an improvement in the quality of those services. This section presents a methodology for evaluating the efficiency and effectiveness of the existing transportation systems. Effectiveness is defined in terms of how well the services meet transportation needs of the elderly and handicapped. Efficiency is defined as how well current services utilize resources available (i.e., funds or vehicles). Based upon this analysis, particular problems with the effectiveness and efficiency of current special transportation services in the area can be identified. In the following chapter, options or strategies for overcoming these inadequacies will be presented.

#### Analyzing Effectiveness of Current Services

The primary purpose of examining the effectiveness of current services is to identify critical gaps in service, unmet needs and shortfalls in the quality service being provided. This could include gaps in services to particular user groups, for particular types of trips, or to persons living in specific geographic areas. Effectiveness of services will be examined by comparing the theoretical need for services with current supply (both sets of data were developed in previous steps). In the needs analyses you compared the number of trips each subpopulation "should be taking" (according to the number taken by similar groups in other areas of the country) with the number provided. Since the "needs analysis" is not an acceptable predictor of the actual demand on a system<sup>15</sup>, this will be used only to identify critical gaps in service and as input into the development of service priorities.

---

<sup>15</sup>The most obvious problem with "needs analysis" is how to determine the number of trips that "should" be taken. The problem has not been solved despite a number of attempts.



## User/Client Groups

The target population for this study will probably be the elderly and handicapped. "Elderly" will probably be defined as those persons over 60 years since this is the definition used by the Title III grantees in Wisconsin. The definition of handicapped will probably include those, who "because of any temporary or permanent physical or mental condition or institutional residence, are unable without special facilities or special planning or design to use available transportation services as effectively as persons who are not so affected."

Since it probably will not be possible to offer services to all persons in this population, it is important to identify where the greatest needs exist in order to place priorities on who will be served. Users are considered in terms of physical characteristics such as age and handicap.

Critical gaps in service were identified during the task on estimating the need for transportation services. This step resulted in an analysis of the availability of alternative modes (i.e., driving, regular bus) for different client groups. In this task the analysis is carried a step further: by taking the unmet needs to various user groups and analyzing how much of this need is being met by currently operating specialized transportation.

This process requires a comparison of the number of trips needed by the following user groups with the number of trips supplied by existing human service agency transportation programs:

1. able-bodied elderly
2. moderately handicapped
  - elderly
  - non-elderly
3. severely handicapped
  - elderly
  - non-elderly

## Types of Trips

It is important in this task to distinguish between the number of trips provided to agency clients only (to either agency functions only or to all activities) vs. the number of trips provided to members of the general elderly and handicapped population.

Table 2-9 presents an example of how this data might be displayed for analysis purposes.



Table 2-9

AMOUNT OF ESTIMATED NEED MET BY HUMAN SERVICE AGENCY  
TRANSPORTATION IN WISCONSIN COUNTY  
(in Number of One-Way Trips per Month)

Number of One-Way Trips per Month		Able-Bodied Elderly	Moderately Handicapped		Severely Handicapped	
			Elderly	Non-Elderly	Elderly	Non-Elderly
Provided by Agency	Agency Function Only					
	Agency Clients/ Any Activities					
General E&H Population						

If the majority of trips by human services are to agency clientele only, then the elderly and handicapped not affiliated with an agency are receiving little service. If the majority of trips are only provided to agency related functions (such as to and from a sheltered workshop) then little service is being provided to other activities, such as shopping.

#### Geographical Areas Served

This analysis compares service in different locations of the service area. In all probability, the greatest disparity in service will be between urban and rural areas. While urban areas will have more elderly and handicapped persons, these are also the areas where there will probably be more alternative modes available (taxis, bus). In addition, human service agencies will more frequently tend to locate in urban areas since it is easier to provide service in more densely populated areas.

This analysis will produce 1) a determination of whether urban or rural areas are most in need of service and, 2) an identification of specific small towns with no service or little service where it may make sense to base service operations (vehicles) in rural areas.

## Setting Priorities on Correcting Ineffectiveness

The product of the analysis of the effectiveness of current operations is the identification of specific users, geographic areas and types of trips that are not being adequately served. These are the most critical gaps in service that exist. Since it probably will not be possible to fill all the critical gaps in service, it will be necessary to set priorities on who will be served. This should be done by the study advisory committee. As decisions are made on how service is expanded, these priorities will guide those decisions.

## Analyzing Efficiency

The primary purpose of examining the efficiency of current services is to determine whether funds and other resources (i.e., staff time) can be better utilized so that resources can be saved. This examination will be done by using five basic measures of efficiency and comparing efficiency measures for current operation with probable ranges for these measures of an "efficient" system. In this way, one can determine whether improvements are possible. In addition, cost efficiency information will be used for purchasing and reimbursing agencies to determine whether they might provide service in a more cost efficient manner.

This method is a guide to determine whether coordination can be used to improve the efficiency of current operations. It can be used to determine:

1. whether there are idle vehicles or excess vehicle down time,
2. whether there is unused capacity on vehicles being operated,
3. whether agencies operating vehicles could purchase service from a coordinated system at a lower rate, and
4. whether agencies purchasing service, using volunteers and reimbursing or subsidizing clients could purchase service from a coordinated system at a less costly rate.

If it has been established that any of the four above conditions exists in an area, then additional planning will be necessary to see whether or how a coordinated service could be used to correct this. This exercise will be done later in the process described in Chapter 5.

Measures of efficiency used will be limited to readily available data. The measures to be used are cost per trip, cost per mile, trips per mile, trips

per hour, and monthly vehicle miles per vehicle. Cost per trip and cost per mile are measures of cost efficiency. Inefficiency in these areas indicates that either costs are too high or productivity is too low. If other productivity is already high, then there is a need to reduce actual expenditures. If not, a reduction in unit costs can be accomplished either by increasing productivity or by increasing efficiency.

Trips per mile and trips per hour are both measures of vehicle utilization. A low trip per mile figure may mean that vehicles are not as fully loaded as possible and that ride-sharing may be appropriate. If vehicle hours are considered as the normal operating day for service (7:00 a.m. - 7:00 p.m. Monday through Friday) rather than actual driving hours, trips per hour will measure whether or not the vehicles are idle at times, and whether time-sharing may be appropriate. Monthly miles per vehicle is also an indicator of vehicle use.

#### Analyzing Efficiency of Human Service Agencies which Operate Vehicles

Analysis of the efficiency of operations can be performed by comparing their measures of efficiency with a range of "good" operating statistics for these measures. Table 2-10 presents probable ranges for these operating statistics. Table 2-11 presents an example of such an analysis for a county in Wisconsin.

#### Analyzing Efficiency of Human Services Agencies which Purchase Service, Use Volunteers and Staff or Reimburse or Subsidize Clients

The common measure suggested for agencies which purchase service, use volunteers or staff or reimburse or subsidize clients is their cost/trip. This measure is compared to the expected cost per trip for a coordinated system in order to determine whether or not these agencies could purchase service from a coordinated system at a lower rate (thus savings money and other resources).

#### Assessing the Overall Potential of Coordination to Improve Services

The analysis of efficiency and effectiveness of current services will lead to an overall assessment of the need for coordination. As illustrated in Table 2-12, if services in the area are already efficient, then there probably are no benefits to be realized from coordination. If services are already efficient and are also effective, then no action is necessary. However, if services are efficient and yet not very effective in meeting the transportation needs of the elderly and handicapped, then it may be necessary to expand or increase services.

Table 2-10

PROBABLE RANGES FOR OPERATING STATISTICS OF  
COORDINATED TRANSPORTATION DEMONSTRATION PROJECTS<sup>1</sup>

Measure	Low	High
<u>Efficiency Measures</u>		
• cost per passenger trip (one-way)	\$ 3.00 <sup>2</sup>	\$10.00
• cost per vehicle mile	\$ 0.75 <sup>2</sup>	\$ 2.00
• cost per vehicle hour	\$10.00 <sup>2</sup>	\$20.00
• load factor	15%	35% <sup>2</sup>
• operating ratio (revenues operating and administrative costs)	0.25	1.0 <sup>2</sup>
<u>Effectiveness Measures</u>		
• passengers per vehicle mile	0.20	3.0 <sup>2</sup>
• passengers per vehicle hour	4.0	18.0 <sup>2</sup>
• annual passengers per service area population	3.0	20.0 <sup>2</sup>
<u>Other Descriptions</u>		
• one-way passengers per month	1,000	8,000 <sup>2</sup>
• monthly vehicle miles per vehicle	2,500	7,500 <sup>2</sup>

<sup>1</sup>These figures were derived by examining all rural Section 147 demonstration projects in the United States, all taxi systems in the United States, all 16(b)2 operations in Pennsylvania, all transit and para-transit systems in Texas and all rural demand responsive systems in Michigan.

<sup>2</sup>"Best" values that truly efficient/effective systems should approach or exceed. The "best" values are indicative of approximately the top 20% of all comparable systems.

Source: Jon E. Burkhardt, "Results of the Rural Highway Public Transportation Demonstration Program", presented at the 59th Annual Meeting of TRB, January 1980 (updated for inflation), TRB January 1980.



Table 2-11

EFFICIENCY MEASURES FOR HUMAN SERVICE  
AGENCIES WHICH OPERATE VEHICLES  
(Wisconsin County)

Efficiency Measures	Health Care Center	Rehabilitation Center	Salvation Army	Family Services	Rehabilitation Hospital
<u>Cost Efficiency</u>					
Cost/trip	\$12.00	\$1.70	\$1.25	N.A.	\$3.80
Cost/mile	N.A.	.32	1.00	N.A.	.91
<u>Vehicle Use Efficiency (ride-sharing)</u>					
Trips/mile	N.A.	.30	.80	N.A.	.24
<u>Vehicle Utilization Efficiency (time-sharing)</u>					
Trips/hour when program is operating <sup>1</sup>	.56	6.34	6.9	11.3	.66
Trips/normal service hour <sup>2</sup>	.05	1.73 <sup>3</sup>	4.0	4.0	.66
Monthly vehicle miles per vehicle	N.A.	1,600	1,200	N.A.	750

<sup>1</sup>The hours included in this calculation are those actual hours the agencies reported that their vehicles are in use or available to be used by their programs.

<sup>2</sup>The hours included in this calculation are normal service hours (7:00 a.m. - 7:00 p.m., Monday through Friday). If agencies reported program operating hours are greater than these normal services hours (as in the case with Anderson Alcoholic Rehabilitation Hospital), the greater number is used and the two trip/hour ratios are equal.

<sup>3</sup>Does not include meals delivered to elderly nutrition sites by two of their five vehicles.



Table 2-12

TRANSPORTATION IMPROVEMENT ALTERNATIVES  
BASED ON EFFICIENCY AND EFFECTIVENESS FINDINGS

EFFECTIVENESS	EFFICIENCY	
	HIGH	LOW
HIGH	<ul style="list-style-type: none"> <li>• continue current operations at same level</li> </ul>	<ul style="list-style-type: none"> <li>• consider coordination</li> <li>• use savings to expand other services</li> </ul>
LOW	<ul style="list-style-type: none"> <li>• continue current operations</li> <li>• obtain additional resources to expand service</li> </ul>	<ul style="list-style-type: none"> <li>• consider coordination</li> <li>• use savings to expand transportation services</li> </ul>

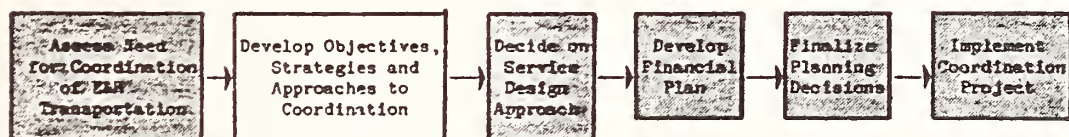
On the other hand, if services are not efficient, then two possibilities occur. If services are effective but not efficient, then services might be coordinated, resources saved and those resources used to provide additional social or health services. If services are neither effective nor efficient, then coordination might be used to save resources which could be used to expand or increase existing transportation.

The primary product of the assessment of coordination potential is a list of conditions and deficiencies in the current services. This list must also identify which problems may be corrected through the use of coordination and which may not. If a county discovers that few of its transportation problems could be corrected through coordination, then the only actions required may be to develop a plan in which future services are developed in a rational coordinated manner. If, however, a county discovers that many of its current transportation problems may be resolved using coordination, then a full plan for coordination of existing services may be pursued.



# 3

## DEVELOPING OBJECTIVES, STRATEGIES AND ALTERNATIVE APPROACHES





# 3

## DEVELOPING OBJECTIVES, STRATEGIES AND ALTERNATIVE APPROACHES FOR THE COORDINATION EFFORT

### COMPONENTS OF THIS CHAPTER

#### Purpose

The purpose of this chapter is to present a procedure for developing objectives, strategies and alternative approaches for the coordination of transportation activities in a County. Obviously, the overall objective of coordinating local transportation services will be to improve those services.

#### Content of the Chapter

The analysis of the need for coordination was performed to identify areas in which current services could (should) be improved or expanded (i.e., problems with the efficiency of current services, critical gaps in services to particular groups, etc.) Based on this assessment, specific objectives for coordinating elderly and handicapped transportation services in the county can be developed. From these objectives, strategies or actions for achieving the objectives can be identified, and alternatives for the overall approach to coordination can be developed. In order for improvements to current services or conditions to be accomplished, the objectives, strategies and alternative approaches must be designed to remedy the problems identified in the review of current services.



This chapter reviews the steps required in the planning process to develop objectives, strategies and alternative coordination approaches. Each step is discussed in a separate section. Figure 3-1 presents the activities required in this process.

### Basic Tasks

There are three basic tasks described in this chapter: developing objectives, selecting strategies for meeting the objectives, and combining strategies to develop alternative approaches to coordination in the area. The steps required to do these tasks include:

1. DEVELOP OBJECTIVES FOR COORDINATION EFFORT
  - a. List problems or deficiencies identified in Chapter 2 activities
  - b. Using chart on p. 47, determine and list objectives for correcting those problems or deficiencies.
2. DEVELOP STRATEGIES FOR COORDINATION EFFORT
  - a. Using the chart (on p. 49 and p. 51) determine and list appropriate strategies/actions which could be used to meet objectives in 1.b.
3. DEVELOP ALTERNATIVE APPROACHES TO COORDINATION
  - a. Combine strategies into compatible groups under three alternative coordination concepts: informational clearinghouse, operational clearinghouse and consolidation.
  - b. Develop list of possible lead agencies in the coordination effort.
  - c. Analyze lead agency relationship to coordination concepts and decide on most appropriate lead agency for each concept.
  - d. List characteristics of three alternative approaches including potential participants and lead agency.

### Products

There are three products resulting from the tasks described in this chapter. It is important to note that each of these products will be used in subsequent tasks:

1. A list of specific objectives for coordination in the county (tied to the problems or deficiencies in current services identified in the tasks described in Chapter 2).
2. A list of specific strategies or actions which can be used to achieve the objectives.
3. A document describing potential alternative approaches to coordination in the county.

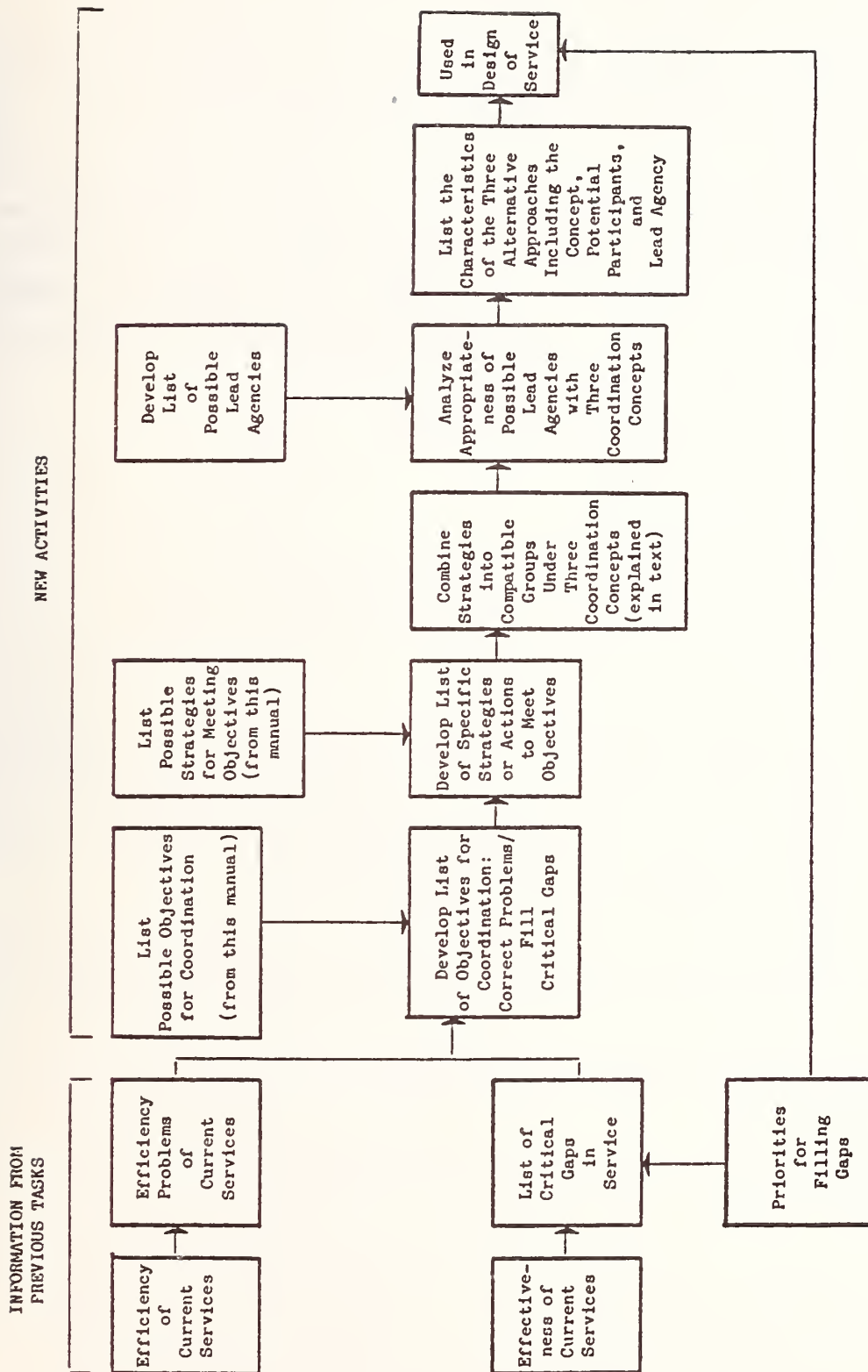


Figure 3-1: HOW TO DEVELOP OBJECTIVES, STRATEGIES, AND ALTERNATIVE APPROACHES

## SPECIFIC OBJECTIVES FOR COORDINATION

The purpose of this step is to identify specific objectives achievable through the coordination effort.

Based upon the analysis of deficiencies in current service, objectives can be developed for improving the services. Some of these may be achievable through coordination while others may not. Only those achievable through coordination will be discussed here. Table 3-1 presents a list of specific objectives organized according to the following categories:

1. Make informed decisions about transportation
2. Reduce actual expenditures
3. Increase amount of service
4. Improve use of resources (i.e., ride-sharing, time-sharing)
5. Improve provision of services

The process of developing objectives for an area will involve specifying problems or deficiencies in current services and developing objectives for each. While a county should not be confined by it, the list in Table 3-1 can be used to give ideas about possible objectives for an area.

The product of this task is a list of objectives for the coordinated project.

Table 3-1

## POSSIBLE OBJECTIVES FOR COORDINATION

1. Make Better Current and Future Decisions Concerning Use of Transportation Resources
  - focus responsibility for E&H transportation in community
  - make informed decisions on transportation programs
2. Reduce Actual Expenditures
  - Reduce capital expenditures on
    - vehicles
    - special equipment
    - maintenance facilities and equipment
  - Reduce overhead expenditures on
    - system management
    - dispatching/scheduling
    - accounting and record-keeping
  - Reduce direct costs on
    - drivers, dispatchers, office personnel
    - supplies
    - taxes
    - maintenance
    - insurance
3. Increase Amount of Service
  - Increase Passenger Trip-making
    - provide more service
    - combine existing service
  - Increase geographic area served
  - Increase number of persons served
  - Increase positive impacts on sub-populations
    - more client groups served
    - more agencies served
4. Improve Use of Resources
  - Improve cost efficiency
    - lower the unit/cost of service
    - more service for same money
  - Improve labor productivity
    - greater driver utilization
  - More output by
    - administrative staff
    - maintenance
  - Improve vehicle utilization
    - better use of capacity and greater vehicle occupancy
    - greater use of vehicles
5. Improve Provision of Services
  - Increase service effectiveness
    - productivity
    - accessibility
  - Improve service quality
    - reliability
    - passenger safety
    - passenger concern
  - Improve Management
    - more funding sources
    - longer term, more stable funding
    - better accounting and record-keeping
    - more stable cash flow

## STRATEGIES FOR MEETING OBJECTIVES

This task involves developing specific coordination actions which can be used to achieve the objectives developed in the previous task.

The coordination strategies or activities which can be used to achieve the objectives developed in the previous task can be grouped into five categories according to the function of the transportation system to be coordinated. These five categories are as follows:

1. community decision-making
2. administration
3. maintenance and parts purchasing
4. capital purchasing
5. vehicle operations

Table 3-2 presents a list of strategies under these categories. Table 3-3 presents a comparison of objectives with strategies which might be used to achieve each objective.

### Coordination of Community Decision-Making and Planning

This category includes all those functions in a community involved in making decisions about priorities for provision of specialized transportation services. This function involves social service agencies, local planners and elected officials, public and private transportation operators and consumers. The strategies for coordinating this function include focusing responsibility for making rational informed decisions about elderly and handicapped transportation in the community with either an existing entity (i.e., a local planning department or human service agency) or with a newly created coordinating committee. In either case, to make informed decisions, one must set up a mechanism for maintaining an inventory of existing needs and services as well as establish a mechanism for doing coordinated or joint planning.



Table 3-2

LIST OF COORDINATION STRATEGIES

STRATEGIES

1. Coordination of Community Decision-Making and Planning Functions

- a. Vest responsibility for decisions about elderly and handicapped transportation services with an existing organization or agency (including grant review and sign-off process).
- b. Vest responsibility for decisions concerning elderly and handicapped transportation services with a newly created multi-organizational coordinating committee (including grant review and sign-off process)
- c. Maintain inventory of current services and needs as basis for informed decision-making.
- d. Coordinate planning responsibility in community by one agency performing this function in conjunction with agency responsible for decision-making.

2. Coordinate Administration

- a. Coordinate management of operations by hiring or designating one person or group of persons to manage the operations of the vehicles.
- b. Coordinate training programs such as driver training, user training, first aid, etc.
- c. Coordinate information and referral and marketing functions by setting up one office/one person to do this.
- d. Coordinate user certification.
- e. Coordinate grants management by having one office write grant applications, report to funding sources and account for the funds.
- f. Coordinate billing and accounting by having one office account for the funds and bill each user/participating agency for coordinating.
- g. Coordinate purchasing of insurance by developing a joint insurance policy.

## STRATEGIES

3. Coordinate Maintenance and Purchasing

- a. Coordinate maintenance and parts purchased by contracting with an outside entity to maintain participating vehicles.
- b. Coordinate maintenance and parts by setting up central maintenance facility and buying in volume.
- c. Coordinate parts purchased by one entity buying in large numbers and selling to participating agencies.
- d. Coordinate purchasing of gas by buying gas in bulk and distributing to participating agencies from central locations.

4. Coordinate Capital Purchasing

- a. Coordinate purchasing of vehicles, radio equipment, office equipment, etc. by having a number of agencies purchasing vehicles in the same order.
- b. Coordinate purchasing by having an agency ordering certain items, vehicles, etc. add their order to that of another agency which regularly places large orders for that item.

5. Coordinate Vehicle Operations

- a. Coordinate vehicle operations by providing information on vehicle operations to agencies and individuals and referring them to service providers.
- b. Coordinate vehicle operation by using centralized routing and scheduling to time-share vehicles.
- c. Coordinate vehicle operation by using centralized dispatcher or centralized scheduling to ride-share on vehicles.
- d. Coordinate vehicle operations by consolidating vehicles and operating them as a fleet.

Table 3-3: COMPARISON OF COORDINATION OBJECTIVES AND STRATEGIES

COORDINATION STRATEGY																									
	Coordination Objectives	1. Coordinate Community Planning				2. Coordinate Administrative Functions								3. Coordinate Maintenance & Purchasing				4. Coordinate Capital Purchasing				5. Coordinate Operations			
		a.	b.	c.	d.	a.	b.	c.	d.	e.	f.	g.	a.	b.	c.	d.	a.	b.	c.	d.	a.	b.	c.	d.	
1. Make Better Decisions	a. focus responsibilities																								
	b. make more informed decisions	★	★	★	★																				
2. Reduce Actual Expenditures	a. reduce capital expenditures																								
	b. reduce overhead expenditures				★							★													
	c. Reduce direct costs																								
3. Increase Amount of Service	a. increase passenger trip-making																								
	b. increase area served																								
	c. Increase number of persons served																								
	d. Increase positive impacts on subpopulations	★	★	★	★																				
4. Improve Use of Resources	a. Improve cost efficiency																								
	b. Improve labor productivity				★																				
		decision responsibility with existing agency	decision responsibility with new coordinating committee	inventory of current services	planning responsibilities	management of operations	training	information and referral	marketing	user certification	grants management	billing and accounting	insurance								share information on current services	central schedule	central dispatch	for ride-sharing	vehicle consolidate
		★	★	★	★	★	★	★	★	★	★	★	★								★	★	★	★	★

★ direct relationship - the strategy can be used directly to achieve the objective.

☆ indirect relationships - the strategy can be used to produce an effect which will indirectly achieve the objectives. For example, all strategies which result in a cost savings can be used to achieve increases in service if the decision is made to expand service with the funds saved.

Table 3-3: COMPARISON OF COORDINATION OBJECTIVES AND STRATEGIES

COORDINATION STRATEGY																								
Coordination Objectives	1. Coordinate Community Planning				2. Coordinate Administrative Functions							3. Coordinate Maintenance & Purchasing				4. Coordinate Capital Purchasing			5. Coordinate Operations					
	a.	b.	c.	d.	a.	b.	c.	d.	e.	f.	g.	a.	b.	c.	d.	a.	b.	a.	b.	c.	d.			
5. Improve Provision of Services	decision response with existing agency	decision response with new coordinating committees	inventory of current services	planning responsibility	management of operations	training	information and referral and marketing	user certification	grants management	billing and accounting	insurance	maintenance plus out parts -- contract	maintenance plus parts -- project	itself	parts only -- one agency buys and sells to others	gas only -- dis-pense from central location	agencies purchase together	agencies tag small orders on one agency's large order	share information on current services	central schedule	central dispatch	for ride-sharing	consolidate vehicle	
	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	
	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	
	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	
5. Improve Provision of Services	c. more output by administration maintenance staff			★	★	★	★	★	★	★	★													
	d. improve vehicle utilization																							
	a. increase service effectiveness	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	
	b. improve service quality	★	★	★		★	★																	
Coordination Objectives	c. improve management	★	★	★																			★	



### Coordination of Administration

Administrative activities include management of vehicle operations, grants management and reporting, billing and accounting, information and referral, marketing, insurance purchasing, user certification and employee and user training programs. Different coordination strategies for administration functions generally involve either hiring an outside entity to administer the project or designating a lead agency to perform these administrative functions on behalf of the participating agencies.

### Coordination of Maintenance and Purchasing

Performing maintenance functions in a coordinated manner involves either 1) setting up a centralized maintenance facility to maintain participating agency vehicles or 2) developing a maintenance contract with a local garage for the coordinated fleet. Purchasing parts and/or gas in bulk for participating agencies is a strategy possible either within the centralized maintenance concept or outside it. In this case, the coordinating organization must have gas storage capability.

### Coordination of Capital Purchases

Coordination of purchases for major capital investments such as vehicles, radio and dispatch equipment, office equipment, etc. involves either 1) a number of agencies getting together and submitting a joint order (in the hope of reducing the unit costs) or 2) a smaller agency tagging its order onto the order of an agency which makes such purchases regularly.

The product of this task is a listing of strategies which could be used to achieve the objectives identified in the previous task. These strategies will be more or less appropriate in the context of the various alternative approaches to coordination.



This task involves taking specific strategies and combining them into plan alternatives.

The alternatives for the overall approach to coordination will include two aspects: alternative coordination concepts and alternatives for an operator/administrator of the project. The alternative concepts will provide the overall approach to coordination. The alternative operators/administrators for the project will be decided separately but are somewhat dependent upon the approach chosen.

In designing and assessing the alternatives it is important to consider the impact of the design on three things:

- volunteer labor
- coordination with the public transit operator
- coordination with private operators

These three considerations are discussed first and then the alternative approaches to coordination are presented.

#### Use of Volunteer Labor in the Coordinated System

Volunteer labor is an important aspect of many social service agency transportation programs. Volunteers can be used as drivers, dispatchers, area coordinators and just about every other job in the transportation system. Sometimes volunteers are reimbursed for their expenses and sometimes they are not.

When designing a coordinated system it is important to consider whether volunteers are currently being utilized by potential participating agencies and whether volunteers could and should be included in the design of the new system. If volunteers are currently being utilized by participating agencies, it is important that the coordination effort not disillusion these individuals since their labor is an important community involvement aspect and cost saving device for the project. If volunteers are not currently utilized, the system may want to attract this type of labor. For example, drivers using their own cars can be used to provide long distance transportation to an individual (such as from Janesville to Madison for a medical appointment). Providing this type of transportation with paid drivers operating vans or buses is very expensive and ties up a vehicle for a long period. Using a volunteer driving their own car can alleviate some of the expense even if the volunteer is reimbursed for mileage.

Some ways to enhance use of volunteer labor include:

- Make volunteers feel that they are needed. When coordination is being planned, explain to the volunteers their role in the new system and explain the value of their assistance. Try not to mix use of paid drivers with volunteer drivers in the same service area. Volunteer drivers may begin to wonder why they are volunteering if the system can afford to pay others.
- Design the coordinated system so that volunteers interested in assisting a particular user group can continue to serve that group.
- Do not complicate the reporting and cost reimbursement procedures for volunteers under coordination.
- Design the system so that volunteers play a logical role in the system that is unique from other (paid) employees. For example, volunteers could provide a personal service that would be too expensive to provide using paid labor. Explain this difference to the volunteers.

#### Coordination with Local Public Transit

In small urban and rural areas there may or may not be a public transit operator in the area. If there is, it will probably be funded through the Wisconsin DOT under the Section 18 program. The Federal Section 18 program is a formula grant program for public transportation in rural and small urban areas which is administered by each state. These funds are made available to local public bodies, nonprofit organizations and public transportation operators. The current regulation for the program<sup>1</sup> includes, among other provisions, an elderly and handicapped provision which requires that a local Section 18 project provide reasonable service to the elderly and handicapped. Since Section 18 was intended to supplement other funds spent on public transportation in rural areas (funds from Federal social service programs and the State), coordination of services and funding is an integral part of a successful Section 18 program. Part of the project supporting information for a local Section 18 application is a description of efforts to coordinate with other public and private operators (especially human service agencies).

If there is a public operator receiving Section 18 in an area, there is a great deal of incentive for that organization to coordinate with other agencies providing transportation. If there is no Section 18 operator in an area, then a coordinated project would have the potential to assume this role. Since Section 18 recipients must serve the general public, this may be beyond what the project you intended to do or may require additional time and planning.

---

<sup>1</sup>U.S. Department of Transportation, "Public Transportation in Non-Urbanized Areas", Federal Register, Vol. 43, No. 240, December 13, 1978, pp. 58308-58310.

It is important to coordinate services with public transit in an area to make most efficient use of resources. In designing the coordinated system, the availability of public transit services to user groups should always be considered so that services under the coordinated system do not overlap. In general, the following should be considered: where public transit exists, elderly and handicapped should be encouraged to use it whenever possible. This can be done by not serving some trips on specialized transit which could be taken on public transit. This can also be done by providing incentives (such as reduced fares or user subsidy coupons) on public transit. When providing elderly and handicapped transport services from rural areas into areas served by public transit, it may be possible to transfer some individuals onto the public transit system once they have been transported from the rural areas.

Potential coordination activities with a public operator are as follows:

### Planning

The public transit operator should be involved in any coordinating committee developed for your area so that that organization may be kept informed and may be relied on for technical assistance in various matters. This organization may be the only source of local technical expertise on transit and may be a valuable source of practical planning and operational information.

### Administration

It may be possible for the local public transit operator to be the lead agency on administering the coordinated effort. This maybe difficult if geographic areas are not compatible. Often public transit service will only be in the small towns and cities in your county. If you are attempting to coordinate services in the entire county, you must consider whether or not it is possible for public transit operators to operate in the entire county and what needs to be accomplished for this to be possible.

It may be appropriate for a public transit operator to administer a coordination project. However, if coordination among all services in a county is being considered, then the transit agency should have the legal authority and willingness to operate throughout a county.

### Operating

It may be possible for the public transit operator to operate the vehicles involved in an operational clearinghouse (especially if there are idle vehicles



which are to be time-shared for general purpose elderly and handicapped transportation) or under a consolidated system. Under a clearinghouse the public transit operator could either 1) be the lead agency administering the clearinghouse and operating the vehicles for time-sharing activities or 2) be under contract to another lead agency operating the vehicles only. Under consolidation, the public operator may either be the lead agency under which the vehicles are consolidated or it may be under contract to the lead consolidating agency.

The biggest consideration for operation would be cost. Often a public operator will have union employees which are higher paid than non-union. If this is the case, it may be more costly to have that agency operate the coordinated vehicles.

#### Maintenance and Purchasing

The public operator may be willing and able to maintain the vehicles operated by the coordinated system or purchase parts, tires, and gas. It may be possible to perform those functions through the transit operator at a lower rate than the coordinated system could do on its own given the economies of scale which may be reached. However, since most public transit operators operate buses while many coordinated agency systems utilize vans, arrangements for coordinated maintenance and purchasing through the public operator may be difficult to achieve.

#### Coordination with Private Operators

Private transportation operators may be a very large source of transportation services in your area and should be considered in planning a coordinated system. Potential private operators include:

- taxis
- school bus operators
- other private bus companies

Private operators can be involved both in the planning of coordination projects and as potential operator of the coordinated system. Contracting with a private operator may be less expensive than other alternatives for operating the coordinated vehicles (human service agencies or a public transit agency). And, in addition, if a taxi cab company exists in an area, it may be less costly to institute a user subsidy program for taxi. This would allow elderly and handicapped who are unable to pay the full cost of a taxi to pay only a portion of the cost, the rest of which is paid by the coordinated project. User subsidy programs are currently in operation in about 22 communities in Wisconsin.

Coordination concepts may be considered in conjunction with alternatives for the general level of resources required. The coordination concepts involve issues of operational, administrative and financial coordination; each is affected by the degree of coordination to be achieved. It is our observation that, in general, the greater the degree of coordination achieved, the greater the benefits realized from the effort.

The degree of operational coordination includes alternatives ranging from a clearinghouse for information on transportation services, through a clearinghouse for ride-sharing and time-sharing, to the total operational consolidation of vehicles and functions. The degree of administrative coordination to be achieved includes alternatives ranging from the participating agencies each managing their own system, to the consolidation of all management functions under one entity. The degree of financial coordination includes alternatives ranging from each participating agency receiving funds individually and using them to transport their own clients, to the total integration of agencies' County, State or Federal transportation funds.

The combination of operational, administrative and financial alternatives leads to the following coordination concepts:

1. A Clearinghouse for Information on Transportation Services;
2. An Operational Clearinghouse for Transportation Services with Ride-Sharing and Time-Sharing; and
3. Consolidation of Operations.

Two options may be developed for each of three concepts. One assumes that services would be provided with current resources and the other assumes the acquisition of additional resources. The expanded resource level may be arbitrarily assumed for comparative purposes only to assess the impact of additional resources on service potential.

For example, six coordination options might be considered:

Option 1 -- Informational Clearinghouse at Current Resource Level

Option 2 -- Clearinghouse with Ride-Sharing and Time-Sharing at Current Resource Level

Option 3 -- Consolidation of Operations at Current Resource Level

Option 4 -- Informational Clearinghouse with Additional Resources



Option 5 -- Clearinghouse with Ride-Sharing and Time-Sharing with Additional Resources

Option 6 -- Consolidation of Operations with Additional Resources

#### Informational Clearinghouse

A County Coordinating Committee would probably be established under this approach. A clearinghouse for information on transportation would be established as part of this committee. The informational clearinghouse would be responsible for maintaining an inventory of current services and providing information on these services to agencies and individuals. The clearinghouse would probably have a telephone number which agencies and/or individuals needing transportation services could call to request information on available services. The users would be referred to the transportation service provider and would have to contact the provider directly. The implementation of this operations concept implies that the administration of the clearinghouse function would rest with one agency. The administration and operation of a coordinated maintenance program could (but would not necessarily have to) be implemented along with this concept. The other operational, administrative and financial functions would be handled by each agency individually.

The expected benefits from implementing only an informational clearinghouse are quite low. It may facilitate communication among agencies and make them more aware of each other's services but that is about all it can do. Since there is no formal mechanism for exchanging services, this concept cannot be expected to increase operational efficiency (and thus save money) very much. It may help to eliminate some gaps in service if lines of communication are open between agencies, but if efficiency is not increased, and money saved, services cannot be expanded. The only coordination objective that can be met effectively under this approach is that of focusing responsibility for elderly and handicapped transportation. Under this concept, new services would probably be provided by the operator of the county 85.08(5) program.

#### Operational Clearinghouse with Ride-Sharing and/or Time-Sharing

Under this approach an operational clearinghouse would be established (probably in conjunction with the establishment of a county coordinating committee). The implementation of this operational concept implies that administration of the clearinghouse function (matching riders with vehicles, etc.) would be the

responsibility of one agency. Coordinated maintenance may or may not be implemented in conjunction with this concept. Other administrative functions (i.e., reporting to funding sources) and the financial functions would probably be handled by each agency individually. Each agency would operate their own systems, but the clearinghouse would actually schedule shared-ride or vehicle use time for participating agencies. This concept includes the following elements:

- Administrative Functions

- consolidation of fiscal responsibility only for transportation provided and purchased through the clearinghouse under one entity (a lead agency) including billing for, and accounting to each participating agency,
- coordination of responsibility for decisions made concerning services to the general elderly and handicapped population,
- central maintenance and purchasing, and
- administrative functions (including financial accounting) for each individual agency's transportation system would remain with each participating agency.

- Operational Functions

- coordination of selected vehicles but with each participating agency operating its own vehicles,
- central scheduling and/or dispatching by clearinghouse, and
- operation of vehicles during unused times by clearinghouse.

The vehicles would continue to be operated by each participating agency, with the coordinating entity identifying unused space or time on the vehicles. The coordinating agency would sell that time to other agencies and schedule the vehicles accordingly. All records of the sales would go through the clearinghouse which would bill the purchasing agency and reimburse the selling agency. In addition, the clearinghouse would be responsible for services to the general elderly and handicapped population.

In the event that additional resources are secured, these would be coordinated through the community involvement mechanism and probably utilized by the 85.08(5) program to increase service to the general elderly and handicapped population.

## Consolidation of Operations

The implementation of this operational concept would mean that the operational functions and most administrative functions would be handled by one consolidating agency (which may be either one of the existing operators or agencies or a newly created organization). The financial components could be handled either by each agency individually or through the integration of funds from the state and Federal levels. If funds were not integrated and consolidation was being pursued, then each individual agency would retain the responsibility for reporting and justifying transportation expenditures to their funding sources. If funds were integrated, the lead agency would be responsible for this administrative function. The concept includes the following components:

- Administration or Management Functions
  - consolidation of all management function under one entity,
  - consolidation of fiscal responsibility under one entity including the billing of, and accounting to, individual participating agencies,
  - central maintenance and purchasing.
- Operational Functions
  - consolidation of selected vehicles, and
  - central dispatching, central scheduling.

The vehicles which are currently being operated by various agencies would be consolidated under one agency or organization with each agency either selling or leasing their vehicles to the consolidating entity.

Participating agencies would then purchase services from a sole provider. Agencies would enter into purchase of service agreements. Each participating agency would be billed for services rendered based upon a unit cost of service times the amount of services provided to that agency.

The agency which consolidated their vehicles would be assured the same level of service they had been providing before coordination took place. Agencies which are not currently operating services would be able to purchase service from the system based upon resources and availability of services. As efficiencies improved, and the system became able to utilize excess capacity, the availability of services should increase. This administering agency would be responsible for billing each of the purchasing agencies as well as for

central purchasing and maintenance. The operating agency would be responsible for providing the transportation services including either central dispatching/scheduling (demand-responsive service) or central scheduling (fixed-route scheduling). The operating agency could be the same as the administering agency.

Under this concept the consolidating agency would be responsible for providing service to the general elderly and handicapped population. Increased services would also be provided by the consolidating agency.

#### Operator/Administrator Options

This category of options deals with which agency or agencies would have responsibility of administering or operating the coordinated system. Consideration of an operator or administrator must be made based upon the following considerations:

- if services are to be provided by a coordinating agency under any option which involves the operation of vehicles, then the coordinating agency would probably be required to take responsibility for operating the vehicles since the vehicles involved are currently being driven by participating agency personnel,
- one agency may be responsible for administering the program and another for operating it, and
- from the review of current operators, it must be considered whether any existing human service agency would be capable or willing to operate the coordinated system with the current resources (i.e., staff) available to it.

The alternatives for an operator and/or administrator of the coordination project are as follows:

- a new independent agency,
- the transit system,
- a private operator (i.e., taxi or bus company),
- one of the social service agencies, and
- County Coordinating Committee.

The appropriateness of a particular type of operator will depend primarily upon the concept to be implemented and the services currently being provided by particular organizations or agencies.

The possibilities for an administrator of the informational or ride- and time-sharing clearinghouse functions include a county coordination committee



or one of the human service agencies. Under the ride- and time-sharing clearinghouse, both would probably contract to the transit system or a private operator for the operation of the vehicles.

If the coordination concept chosen is consolidation of vehicles, then both an administrator and an operator must be identified. The possibilities for an administrator of such a system may be limited (because of the county-wide nature of the program) to a county coordinating committee, an existing human service agency, or a newly created non-profit transportation agency. As with the clearinghouse concept, if a county coordinating committee or an existing agency were to administer the consolidation effort, both would probably contract out for the operations of the vehicles to a public or private operator. Which provider would operate the vehicles would be established by contacting the private operators and determining whether they could provide service at a lower rate than the public operators. If a new entity were created (probably a private non-profit corporation), that entity would both administer and operate the program.<sup>2</sup> In any case, the county coordinating committee would retain oversight responsibility.

The product of this task is a document describing potential alternative approaches to coordination in the county. This document will contain a list of the characteristics of the alternative approaches as well as potential participating agencies and a lead agency.

---

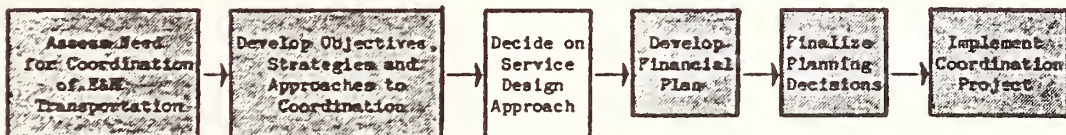
<sup>2</sup>It would probably not be worth the time or effort to create a new organization which would only administer the program.





# 4

## DECIDING ON A SERVICE DESIGN APPROACH





# 4

## DECIDING ON A SERVICE DESIGN APPROACH

### COMPONENTS OF THIS CHAPTER

#### Purpose

This chapter presents a methodology for assessing the alternative coordination approaches developed in the previous tasks and for selecting one for further development and implementation.

#### Content of the Chapter

The alternatives for the coordination approach are assessed in terms of probable costs, probable revenue, probable ridership, impacts on users and potential implementation issues. Each of these areas should be examined separately for each alternative and then a total assessment made. Costs are examined in terms of administrative, operating and capital costs and are predicted on a cost per vehicle mile basis. Ridership is examined both in terms of the number of trips that could be provided (constrained by the resources available for each alternative) and in terms of the predicted demand for the services that would be provided under the various alternatives.

## Basic Tasks

Basic tasks for this chapter include developing estimates of costs, revenue, ridership, and other impacts for each alternative approach developed. In this chapter it may be useful to assume an increase in funds available to determine the impact that additional funds would have on the expansion of services. The basic steps involved in these tasks include:

### 1. DETERMINE PROBABLE COSTS

- a. Decide on wage rate (union labor, non-union labor, or volunteer labor).
- b. Using information in manual (p. 71), determine the cost/mile and cost/trip for demand responsive or fixed schedule transportation.
- c. Determine costs for transportation services provided by social service agencies.
  - using trips information from potential participating agencies. Record this as the agency related trips for agencies participating in the different coordination alternatives. Determine how much it would cost to provide existing agency service under the different coordination alternatives. Record these costs as the cost of agency transportation for the alternatives;
  - compare current agency costs to projected agency costs under coordination alternatives and determine whether costs are saved. If costs are saved under clearinghouse alternatives, assume these are cost savings to agencies and record agency cost savings on matrix; and
  - if costs are saved under consolidation alternatives, assume these are system savings. If no unmet needs exist, record these as cost savings to individual agencies. If there are unmet needs, use these to expand services (in next task).
- d. Determine costs for general purpose elderly and handicapped transportation
  - using trip information on existing general purpose transportation, determine whether costs for the service would be less under the different coordination alternatives;
  - if costs are saved and no unmet needs exist, these can be recorded as cost savings to individual agencies providing general service; and
  - if costs are saved and unmet needs exist, then these will be used to expand service.



- e. Make an assumption about additional funds that might be available.
- f. Determine funds available to expand service by adding costs saved in Task 1.c and 1.d to the additional funds that have been assumed. Record this as the costs available to expand general purpose transportation services.

2. DETERMINE PROBABLE RIDERSHIP

Having already recorded agency related trips in Task 1.C, this task involves determining probable ridership on the general purpose portion of the coordinated system.

- a. Determine potential ridership using information of funds available for general purpose transportation (1.f) and using the cost per trips estimated (1.b) determine how many trips it is possible to provide for the funds available.
- b. Determine demand for services
  - make assumptions concerning service characteristics such as fares, reservation time and type of service; and, using information on funds available (1.f), the cost/ vehicle mile estimate (1.b), and assumptions from above, apply the demand model and produce an estimate of demand.
- c. Compare Potential Ridership to Estimated Demand for Services
  - if estimated demand is greater than or equal to potential ridership, then record estimated demand in matrix; and
  - if estimated demand is less than potential ridership, then vary the assumptions about service characteristics until demand is at least equal to potential ridership. Then record estimated demand in matrix.

3. DETERMINE PROBABLE REVENUE

- a. Using funds from participating agencies for services record as probable agency revenue.
- b. Using assumptions about fares developed in 2.b or 2.c, multiply fares times the number of trips to compute revenue and record as probable revenue from fares.

4. IDENTIFY IMPACTS ON PRIORITY USER GROUP

If additional trips are provided, determine how the extent to which different priority user groups, geographic areas and trip types can be served.

5. ANALYZE ALTERNATIVE APPROACHES IN TERMS OF IMPLEMENTATION CONSIDERATIONS (such as political and community acceptability potential to meet other transportation and non-transportation objectives.)

6. SELECT ONE ALTERNATIVE APPROACH AS MOST APPROPRIATE

## Products

The major product of these activities described in this chapter is a matrix of characteristics of each option used in the overall assessment. The individual characteristics developed include estimates for:

1. agencies involved
2. funding/month by source
3. vehicle miles/month
  - a. agency
  - b. general purpose
4. passengers/month
  - a. agency
  - b. general purpose
5. number of trip demanded/month
  - a. agency
  - b. general purpose
6. revenue/month
  - a. agency
  - b. general purpose
7. additional trips/month possible
8. cost savings/month possible
9. other benefits/savings possible

## PROBABLE COST

The result of this task is the prediction of probable costs for the coordinated service.

The method suggested for prediction of costs for the project alternative is the use of a cost model developed by Ecosometrics to predict costs based upon actual experiences in similar situations.

The model used to predict costs was calibrated with data from a large number of systems throughout the country that are similar to the proposed project. The model allows for the conversion of all system costs into a cost per vehicle mile basis, including administrative, capital and operating costs. Capital costs are included as the cost of depreciation of existing vehicles. In addition, all costs predicted are for the operation of vans, since most of the vehicles that would be operated by the system are of this type. The costs are presented for both demand responsive service and fixed schedule service. Both types of service will probably be needed to provide transportation in rural areas of the county and to the human service agencies involved. It should be noted that predicted costs are for 1980, and that costs will be higher in later years due to inflation.

Table C-1 through C-6 presents the breakdown of costs (on a per vehicle mile basis) developed for the services using unionized labor, non-unionized labor and volunteer labor. The basis for each cost prediction is also shown. The number of passengers/vehicle mile that can be carried on the demand responsive service is assumed to be .25 and the cost per one-way passenger trip is assumed to be between \$3.00 and \$4.50 depending upon labor costs. The number of passenger/vehicle miles that can be carried on fixed schedule service is assumed to be .40 and the cost per one-way passenger trip is assumed to be between \$1.80 and \$2.50 depending upon labor rates. The assessment of options should be performed using the labor rates which would be used in the project.

It should be noted that under the consolidation options, the cost per passenger trip probably will be less than indicated above due to increased efficiency in the system. These increases in efficiency would be the result

of carrying more passengers on currently operating buses. However, in this analysis consideration of this possibility will depend upon the existence of overlap or duplication of service in your area. (This reduction in unit cost is most evident in areas with a great deal of overlap or duplication in service).

The products of this task are as follows:

- decision on wage rates for labor under the alternative coordination approaches
- cost/mile and cost/trip for demand responsive or fixed schedule service under the coordinated system
- costs for human service agency transportation under each alternative coordination approach
- costs for general purpose elderly and handicapped transportation services under each alternative coordination approach
- cost savings possible under each approach.

## PROBABLE RIDERSHIP RANGE

The result of this task is two fold: an estimate for the number of trips the project can provide for the costs involved and an estimate of the demand for the services provided by the coordinated project.

Probable ridership is examined in two ways: by predicting the demand for trips (based upon the number of bus miles the project can provide for the funds available), and by calculating the number of trips the project can provide for the costs.

### Estimated Number of One-Way Passenger Trips

The calculation of the number of trips which the project can provide is based upon the following assumptions:

<u>Demand Responsive</u>		<u>Unionized Labor</u>	<u>Non-Unionized Labor</u>
• Cost per vehicle mile <sup>1</sup>	=	\$1.109	\$ .966
• Cost per passenger	=	\$4.50	\$3.88
• Passengers per vehicle mile <sup>2</sup>	=	.25	.25
<u>Fixed Schedule</u>			
• cost per vehicle mile <sup>1</sup>	=	\$1.016	\$ .872
• cost per passenger	=	2.54	2.18
• passengers per vehicle mile <sup>2</sup>	=	.40	.40

<sup>1</sup>Estimated using data in Table C-1 through C-4.

<sup>2</sup>Estimated using data in Table 2-8.

The cost per vehicle mile was predicted in the previous section. The number of passengers per vehicle mile was predicted based upon similar systems around the country. The cost per passenger was derived from the previous two measures, and predicted based upon similar systems.

Using information on funds available for transportation, and using the above cost/trip information, it is possible to determine how many trips it is



possible to provide for the funds available. For example, if union labor is being used and if it has been determined that there is \$2,000/month available (\$1,500/ month for agency transportation on a fixed-schedule basis and \$500/ month for general purpose demand-responsive transportation), then it would be possible to provide 590 fixed-scheduled trips/month to agencies and 111 demand-responsive trips/month to the general elderly and handicapped population.

### Demand for Services

The demand for the service provided under the various alternatives was predicted using the Ecosometrics rural transit and elderly and handicapped demand models calibrated with data from systems similar to this project. Demand is highly dependent upon the bus miles of service and the bus miles provided by the various alternatives in large part, determines demand for those services.

Essentially, the demand model attempts to predict patronage on the system as a function of:

- operating characteristics of the transportation system: reservation time, fares and bus miles. In this case the reservation time is assumed and the bus miles equal the number being provided by each alternative.
- all types and amounts of transportation services provided in the area: the competition from other bus systems on taxis. For this analysis it is possible to assume that the priority service to be provided by the system being designed has no competition.
- the characteristics of the population to be served: the number of restricted eligible users on the system.

The model used to predict demand on the demand responsive and fixed-route/ fixed-schedule systems is presented in Tables 4-1 and 4-2.

Demand for the service may be less than the supply (in terms of the number of trips possible for the funds available). If this happens, the assumptions should be made that the system will serve at least 10% of its passenger trips to high density origin, or destinations (i.e., elderly housing projects or sheltered workshops.) This indicates that in order for the system to attract enough passengers to be cost effective, it must serve high density origins or destinations in the rural areas as much as possible.

Table 4-1

MODEL FOR PREDICTING DEMAND FOR  
RURAL FIXED-ROUTE SYSTEMS

$$\text{RTPASS/M} = 0.443 \times \text{BMILES}^{0.407} \times \text{FREQ}^{.533} \times \text{RESTRPOP}^{0.610} \times \text{COMPBMS}^{-0.123}$$

where

- RTPASS/M = the number of round-trip passengers per month for the system.
- BMILES = the total vehicle miles per month for all vehicles of the system
- FREQ = the average monthly round-trip frequency of service along the fixed routes of the system (found by dividing the total monthly bus miles by the total round-trip route mileage)<sup>1</sup>
- RESTRPOP = the number of persons (in hundreds) living along the routes who are allowed to use the system (if there are no restrictions on use, this number is the same as the total population), and
- COMPBMS = the sum of the monthly bus miles of all other fixed-route and demand-responsive systems<sup>2</sup> operating in the service area (which may or may not coincide with county boundaries)

<sup>1</sup>The "round-trip route mileage" is defined as the sum of actual physical length of all routes, regardless of the number of times certain portions of the street or road may be duplicated by other routes.

<sup>2</sup>Not including the mileage provided by taxi services.

Source: Jon E. Burkhardt and Armando M. Lago, Methods of Predicting Rural Transit Demand, prepared for the Commonwealth of Pennsylvania, April 1976.

Table 4-2

MODEL FOR PREDICTING DEMAND FOR  
RURAL DEMAND-RESPONSIVE SYSTEMS

$$\text{RTPASS/M} = 0.013 \times \text{B Miles}^{1.098} \times \text{RETIME}^{-0.217} \times \text{HIPROBPOP}^{0.194}$$

where

RTPASS/M = the number of round-trip passengers per month for the system

B Miles = the total vehicle miles per month for all vehicles of the system

RETIME = the average time in days required between a call for service and the time a vehicle arrives

HIPROBPOP = the number of persons in the county (expressed in hundreds) who are the likely users of the system, usually defined as the poor plus the elderly who are not poor (except, when there are restrictions on who may use the system, the number of persons in the service area who are eligible for the service should be used)

Source: Jon E. Burkhardt and Armando M. Lago, Methods of Predicting Rural Transit Demand, prepared for the Commonwealth of Pennsylvania, April 1976.

This task produces 1) an estimate of the potential number of one-way trips that can be provided under the various coordination alternatives (given the funds available under each alternative), 2) an estimate of the demand for services (number of one way trips) under each alternative, and 3) a comparison of potential ridership with expected demand.

## PROBABLE REVENUE

This task involves prediction of probable revenue for the coordinated project.

The first thing to decide in this step is whether the system will charge fares and to whom. It is suggested that the general purpose elderly and handicapped program charge a minimal fare for its service (25 cents per one-way trip). This would do two things: 1) it would generate revenue for the project which could be used to provide additional service, and 2) it would avoid setting an image for the project as a welfare or subsidy program. Probable revenue is estimated by taking the estimated number of trips and multiplying it by the assumed fare. Revenue would also be generated from service contracts with agencies involved.

This task produces a prediction of probable revenue under the alternative coordination approaches including both estimated revenue for users and estimated project revenue from contracts with participating agencies.



## POTENTIAL IMPLEMENTATION ISSUES

The primary implementation issues for the options is local acceptance of the project. Community agencies involved in coordination should probably be willing to accept an informational clearinghouse or operational clearinghouse. However, it may be unclear how a consolidated system would be accepted either by the community or by the potential participating agencies. One of the roles of the advisory committee is to help ascertain the acceptability of all the alternatives.

A number of practical implementation issues are important and should be addressed in some detail during the development of the implementation plans. Two of these are phasing and personnel.

Two phasing issues are important. The first concerns geographic scope. It may be advisable to divide the county into smaller regions in order to appropriately phase the implementation of the project. This proposal is offered on the grounds that operating experience is best gained on smaller operations in which mistakes are not necessarily devastating. Operations will run more smoothly and the management will have more confidence if the size of the system expands slowly from a small operation. The second phasing issue is that of the probable time frame for the cost savings generated through increased efficiencies. The largest benefits will occur when operations have reached a large and stable level. Likewise, there may be certain start-up costs -- personnel training, vehicle maintenance, professional assistance, and the like -- that reduce the probability of immediate savings. More than six months will probably be necessary before substantial savings or efficiencies can be realized.

Personnel issues are critical. First, the director of transportation operations is vital to the success of the project. A major factor in the success of similar systems across the country is the director. The person hired to fill this position should be intelligent, experienced, resourceful, energetic, and dedicated -- in short, a rather unusual individual. Obviously, a good salary will be required to attract a person with such qualities.

The product of this task is a list of issues or considerations which may either enhance or inhibit implementation of the various coordination approaches being considered.

## CHOOSING A COORDINATION APPROACH

Once each alternative has been assessed according to the considerations above, these assessments should be pulled together and the alternatives considered as total projects. Table 4-3 presents an example of how to present this data for a comparative assessment of alternatives.

The two products of this task are 1) a tool to compare alternative coordination approaches and 2) the choice of one approach. The analysis tool consists of a matrix of the characteristics of each coordination alternative including costs, ridership, revenue, cost savings and other benefits or savings.

Table 4-3: EXAMPLE OF ASSESSMENT OF ALTERNATIVES

	OPTION #1	OPTION #2	OPTION #3	OPTION #4	OPTION #5	OPTION #6
1. AGENCIES INVOLVED	Informational Clearinghouse No Expansion of Services	Clearinghouse with Time Sharing No Expansion of Service	No Expansion of Service	Informational Clearinghouse Expansion of Services	Clearinghouse with Time Sharing Expansion of Services	Consolidation Expansion of Service
	<ul style="list-style-type: none"> <li>County Steering Committee</li> <li>85.08(5) County Van<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>County Steering Committee</li> <li>85.08(5) County Van<sup>2</sup></li> <li>Health Care Center</li> <li>Northern Wisconsin Center<sup>4</sup></li> <li>Victory Memorial Hospital<sup>4</sup></li> </ul>	<ul style="list-style-type: none"> <li>County Steering Committee</li> <li>85.08(5) County Van<sup>2</sup></li> <li>Health Care Center</li> <li>DSS-volunteers &amp; purchase</li> <li>COA-purchase</li> <li>Unified Service-purchase</li> <li>Northern Wisconsin Center<sup>4</sup></li> <li>Victory Memorial Hospital</li> </ul>	<ul style="list-style-type: none"> <li>County Steering Committee</li> <li>85.08(5) County Van<sup>2</sup></li> <li>Health Care Center</li> <li>Northern Wisconsin Center<sup>4</sup></li> <li>Victory Memorial Hospital<sup>4</sup></li> </ul>	<ul style="list-style-type: none"> <li>County Steering Committee</li> <li>85.08(5) County Van<sup>2</sup></li> <li>Health Care Center</li> <li>DSS-volunteer &amp; purchase</li> <li>COA-purchase</li> <li>Unified Service-purchase</li> <li>Northern Wisconsin Center<sup>4</sup></li> <li>Victory Memorial Hospital<sup>4</sup></li> </ul>	
2. Funding/month	85.08(5) van general \$265	85.08(5) van-general \$265 85.08(5) van-agency 502 Health Care Center 1,390 \$2,157	85.08(5) van-general \$265 85.08(5) van-agency 502 Health Care Center 2,714 DSS-volunteer 451 DSS-purchase (included in van) COA-purchase (included in van) Unified Services (included in van) fares 76 \$4,000	New <sup>2</sup> 85.08(5) van-general 265 85.08(5) van-agency 502 Health Care Center 2,714 DSS-volunteer 461 DSS-COA & Unified Service-purchase 1,390 Includes above fares 80 \$3,399	New <sup>2</sup> 85.08(5) van-general 265 85.08(5) van-agency 502 Health Care Center 2,714 DSS-volunteer 461 DSS-COA & Unified Service-purchase 1,390 Includes above fares 80 \$3,399	New <sup>2</sup> 85.08(5) van-general 265 85.08(5) van-agency 502 Health Care Center 2,714 DSS-volunteer 461 DSS-COA & Unified Service-purchase 1,390 Includes above fares 80 \$3,399
3. Vehicle Miles/Month	592 General 0 Agency 0 Total 592	592 2,128 2,720	1,821 2,328 4,149	1,872 0 1,872	1,872 2,128 4,000	3,108 2,328 5,436
4. Passengers/month	148 General 0 Agency 0 Total 148	148 532 680	455 582 1,037	468 0 468	468 532 1,000	777 582 1,359

Table 4-3: (continued)

	OPTION #1	OPTION #2	OPTION #3	OPTION #4	OPTION #5	OPTION #6
	Informational Clearinghouse No Expansion Of Services	Clearinghouse with Time Sharing No Expansion of Service	Consolidation No Expansion of Service	Informational Clearinghouse Expansion of Services	Clearinghouse with Time Sharing Expansion of Services	Consolidation Expansion of Service
5. Revenue/month General (fares 25¢ per trip) Agency Total	\$0 0 \$0	\$ 0 1,892 \$1,892	\$ 76 3,667 \$3,743	\$80 0 \$80	\$ 80 1,892 \$1,972	\$ 150 3,667 \$3,817
6. Demand Trips/ Month General with High Density General with-out High Density Agency Total	271 133 0 133-271	271 133 532 665-803	591 291 582 874-1,174	603 297 0 297-603	603 297 532 829-1,135	857 422 502 1,004-1,439
7. Impact on Trips General Agency Total	same	same	307 additional trips same 307 additional trips	320 additional trips same 320 additional trips	320 additional trips same 320 additional trips	629 additional trips same 629 additional trips
8. Impact on Costs General Agency	same	0 \$1,324 savings to HCC	\$1,469 add. used by consol. system \$1,469 net savings to HCC & DSS	\$1,162 additional \$ same	\$1,162 additional \$ 1,324 savings to HCC	\$2,631 additional \$ 1,469 savings to HCC & DSS
9. Other Implications		• savings realized by HCC rather than systems as a whole	• savings by HCC put back into transportation system (from operating vehicle)	• no vehicles for further expansion	• vehicles available for further expansion but need lift equipped vehicle	• savings to HCC put back into transportation system • savings from DSS put back into system

<sup>1</sup>This includes only the cost of operating the COA portion of the County van which serves the general E&H population.

<sup>2</sup>This includes the cost of operating the agency purchase portion of the County van as well as the COA general E&H portion.

<sup>3</sup>No fares are included here since the services to the general E&H population are purchased by the COA which is not able to charge actual fares for services to the elderly.

<sup>4</sup>The Northern Wisconsin Center and Victory Memorial Hospital would be included in time sharing activities only in the Clearinghouse and consolidation options. Since, complete information is not available for them, they are not included in this analysis. However, since they would only be leasing their vehicles to the project their inclusion would have little or no effect on the final outcome of the analysis.

---

## DEVELOPING THE FINANCIAL PLAN







# 5

## DEVELOPING THE FINANCIAL PLAN

### COMPONENTS OF THIS CHAPTER

#### Purpose

The purpose of this chapter is to describe development of a comprehensive financial plan. It presents elements of a plan designed to provide complete information for making routine administrative decisions, preparing required reports for each funding source, justifying certain system changes, and satisfying official audit requests.

#### Chapter Sections and Content

This chapter is divided into four sections, each describing one element of the financial plan:

- Budget,
- Funding sources,
- Billing and accounting, and
- Record-keeping.

Each section presents the elements of a financial plan in terms of three aspects: policies, procedures, and responsibility.

## Basic Tasks

The preliminary staff work in designing budgeting, billing, accounting, and record-keeping systems, will be a joint effort. It will require collaboration among those agency personnel most familiar with financial activities in their own agency. This may include an accountant or bookkeeper, scheduler, transportation coordinator or manager, program director, or a combination of those. The coordination project director, from the lead agency, would coordinate the effort. The basic tasks in developing a financial plan are:

1. PREPARING A PROJECTED BUDGET
  - a. establishing policies, procedures and assigning responsibility
  - b. developing cost categories
  - c. calculating costs
  - d. preparing the budget
  - e. maintaining and modifying the budget
2. ESTABLISHING COMMITMENTS FROM FUNDING SOURCES
  - a. establishing policies, procedures and assigning responsibility
  - b. determining what funds exist
  - c. deciding which funding source requirements are acceptable
  - d. applying for funds
  - e. maintaining efficient cash flow from that source
3. CREATING A BILLING AND ACCOUNTING SYSTEM
  - a. setting a billing rate
  - b. establishing an allocation and billing formula
  - c. billing charges and collecting reimbursements
  - d. setting up revenues and expenditure accounts
  - e. maintaining files and accounts
4. ADMINISTERING RECORD-KEEPING REQUIREMENTS
  - a. determining information collection and storage procedures
  - b. modifying and creating new forms
  - c. collecting and storing the data
  - d. reporting to funding sources and responding to audits.

## Products

Products of the plan will be

- Project budget:
  - projected expenses and revenues per line item; and
  - sources of funding per general category

- Memo including:
  - bank account number and other information
  - credit rating information; and
  - description of the cash flow process
- List of funding sources and their limitations and requirements
- Applications for funding
- Signed funding contracts
- Worksheet for calculating charges and reimbursements
- Material describing accounting policies and practices
- Revenue and expenditure accounts
- Material describing record-keeping procedures and required records.

This step establishes the policies and procedures for preparing a project budget and designates responsibilities.

The coordinated system requires a separate project budget regardless of which coordination approach is used. It is important to uncover all expenses which are attributable to the project and to carefully categorize all costs. This assures:

- a. that when the service charges are calculated, no legitimate costs will have been inadvertently omitted;
- b. that the appropriate source of funds or the appropriate agency can be billed; and
- c. that the project can accurately account to its funding sources, participating agencies, auditors and the community.

#### Policies for Budgeting

It is necessary to establish policies for specifying cost categories, calculating costs and for developing a budget format. Establishing these policies requires extensive negotiation between the lead agency and the participating agencies, and funding sources. It assures that the technical aspects of preparing the budget reflect both governmental requirements and a sense of fairness and equity. It also provides a justification for the specific procedures employed to prepare the budget and provides back-up documentation where necessary for audits.

First, the group must establish specific cost categories to be included. These fall into three groups - administrative, operating and capital costs. Capital costs include vehicles and equipment (unless leased). The other two groups include the cost categories suggested in Appendix D-1.

It must first be decided whether or not to separate budgets for different types of service (e.g., subscription and demand responsive services offered by the same coordinated system). This may prove useful since some services (i.e., demand responsive) are more expensive than others.

Once the method of categorizing costs has been established, the group must specify the method for calculating costs in each category. These methods might calculate costs as follows:



- actual costs in identical or similar categories incurred by participating agencies in the previous year,
- actual costs from the previous year adjusted for inflation as well as for savings anticipated through coordination,
- costs projected from national or regional experience, or
- predicted costs using mathematical models

In addition, a budget format should be established before the actual preparation begins. Ideally, the format will incorporate (as much as possible) the current budget category labels, column widths and spacing as those from the participating agencies.

### Procedures for Budgeting

The methods to be used in preparing the budget will have already been specified (see Policies) and the specific procedures for each of those methods must be detailed. These procedures should be formalized and maintained on file and updated as needed. Generally, these procedures are:

1. List all cost categories.
2. Divide cost categories into administrative, operating and capital costs.
3. Identify those cost categories generally allowable under various funding sources.
4. Calculate cost estimates. (See Appendix D-2 for costs calculated in other systems).
5. Circulate the budget for approval among all participating agencies and the advisory committee.
6. Amend the budget if necessary once funding sources are verified.
7. Maintain the annual budget on file.
8. Compare budget estimates to actual annual expenses.

### Responsibility

Since policy making is an administrative responsibility, it will ultimately fall to the lead agency. The lead agency will generally determine policy in consultation with technical advisors, financial personnel from the participating

agencies and representatives of the various funding sources. The procedural tasks in preparing the budget will generally be the responsibility of staff familiar with financial tasks, either on the lead agency staff or hired specifically for this task. Specifically, the following responsibilities must be assigned:

- developing policies;
- monitoring, evaluating and modifying the policies as needed;
- developing procedures;
- monitoring, evaluating and modifying the procedures as needed;
- preparing, producing and distributing the budget;
- maintaining the budget file; and
- renegotiating the budget annually.

During this process administrators and various technical and citizen advisors will produce:

- a description of policies for developing, maintaining and modifying the budget,
- a project budget, and
- a list of procedures for preparing and distributing it.

## FUNDING SOURCES

This step establishes the policies and procedures for funding the project and designates various responsibilities.

It is important to aggressively seek funding sources for the coordinated system and to understand the implications of each funding program. The inclination generally is to transfer some of the funds which had been used for the agencies' transportation services to the coordinated system and then to forget about funding. While agency program monies may provide a base for funding the coordinated system, it needn't represent the whole funding package. There are a number of transportation sources available at both the Federal and local level which are not tied to particular agency programs or clients. For example, Comprehensive Education and Training Act (CETA) and HUD Community Development Block Grants (CDBG) on the Federal level and the 85.08(5) funds on the State level. Also, mixing various program funds requires special consideration, particularly in cases where funding limitations and requirements differ.

### Funding Policies

Policies should be established to assure that the total funding package which is eventually assembled will reflect the widest range of possibilities and the most careful tailoring of funding sources to the type of coordinated service envisioned. To formulate the basic policies on funding, a thorough examination of what funds exist locally, regionally, state-wide and nationwide is needed. See Appendix D-3 for sources available to transportation systems in Wisconsin. Two policies can then be established:

1. A determination on which "funding source restrictions" are acceptable. These might include limitations or requirements on:
  - client eligibility criteria
  - client certification and reporting requirements
  - trip purposes
  - origins and destinations
  - geographical area
  - vehicle equipment
  - operating hours
  - costs of specific budget items
  - allowability of specific cost categories (e.g., capital, operating or administrative expenses)
  - reimbursement or lump sum or advanced reimbursement
  - mixing client types on vehicles

2. Specification of what kind and what level of effort the participating agencies are willing and able to undertake for securing various funds and for processing those funds. This requires negotiation with representatives of those funding sources and often includes the use of specific application and reporting forms. In order to decide how much the agencies will need to do to use each funding source, the forms and their instructions should be collected from each.

#### Funding Procedures

- Approach the funding organizations to find out:
  - the amount of funds available;
  - the amount of funds for future years;
  - the type of services funded;
  - restrictions;
  - application procedures and deadlines.
- Apply for funds;
- Sign appropriate grant or contract award documents;
- Maintain file on each funding source;
- Set up bank accounts to hold the funds;
- Authorize appropriate staff to draw on those accounts.

#### Responsibilities for Funding

To develop the policies and follow the procedures, responsibility must be established for:

- seeking funds,
- being constantly aware of new sources of funds and changes in current sources,
- negotiating with the funding organizations regarding limitations and requirements attached to the funds,
- preparing the applications for funds and signing the contract(s),
- maintaining one file per funding source,
- processing the funds, and
- drawing on those funds.

These various responsibilities might be assigned to the lead agency, other participating agencies, an outside accountant or bookkeeper, legal consultants, or technical advisors provided through administrators of the funds.

During this process, the following will be produced:

- a roster of possible funding sources and information on each
- application for funding
- signed contracts or grant with the funding organization(s)
- information on the flow of funds from each source
- files on each funding source



This step establishes the policies and procedures of a billing and accounting system and designates responsibilities.

A separate system of billing for services and accounting for revenues and expenditures must be established for the coordinated system. The accounting system will probably include elements from accounts maintained by the participating agencies, but must also reflect the combined services of the new project. Maintaining separate accounts is essential in meeting external auditing and reporting requirements as well as very helpful in making periodic internal budgetary and operational assessments. Establishing a billing rate and system for transferring funds into the project serves a number of purposes. It gives a rational, reasonable and equitable basis to any "purchase of service" charged to participating agencies and a justifiable unit cost for making monthly withdrawals from the funding source.

#### Policies for Billing and Accounting

Establishing an equitable and usable billing and accounting system requires development of several policies:

1. Determining the basis for calculating a billing rate by specifying the costs to be included and the units (miles, trips, passengers, etc.) to be billed.
2. Establishing whether accounts are to be maintained on an accrual or on a cash basis. See Appendix D-4 for descriptions of the two methods.
3. Determining, through negotiations with the funding agencies, how the cash flow from the funding source will be maintained (i.e., one lump sum allocation, a partial allocation with monthly billing for the remainder or monthly billing alone) and on what billing cycle and within what fiscal calendar.
4. Establishing what arrangements will be made for participating agencies to also account to their individual funding sources on the use of program funds for transportation once services are coordinated. This requires designation of which expense can actually be attributed to providing transportation service. This is especially important when an employee (e.g., a nutrition site aide) is paid with program funds but does spend some time scheduling rides or driving for the coordinated project. Both the administrators of the coordinated project and of the agency program funds will need documentation justifying the designation. Those expenses then will either be included in calculating the billing rate or counted as that agency's "in-kind" contribution.



5. Clarifying which costs are "billable" to the various funding sources. For example, under some funding sources vehicle depreciation is not an allowable cost. And some sources restrict funds to cover only a certain percentage of various expenses (i.e., administrative, operating and capital) or require a specified match from state and locals or other funds.

#### Procedures for Billing and Accounting

The procedures needed to implement those policies are outlined below and examples are included as appendix material:

- Prepare a separate account for each category including:
  - revenues:
    - passenger fares
    - prepaid fares or passes
    - charter revenue
    - revenue from contracts with agencies purchasing service for their clients
    - operating grants and contracts
  - expenditures:
    - administration
    - maintenance
    - indirect operating
    - vehicle operation/mile
    - vehicle operation/hour
- Costs to be included in each category are suggested in the examples of line item budgets in Appendix D-5.
- Collect data on estimated costs in the categories. For example, see form in Appendix D-6.
- Calculate a reimbursement rate per trip or per mile as in the examples in Appendix C.

#### Responsibilities for Billing and Accounting

- The lead agency is responsible for:
  - coordinating the choice of allocation, billing and accounting methods;
  - conferring with the funding organizations to maintain an efficient cash flow;
  - establishing central accounts;
  - maintaining central files on all financial information;
  - negotiating with both the funding organizations and the participating agencies as necessary;
  - establishing the billing rate; and
  - coordinating billings and payments.

- Each participating agency is responsible for:
  - maintaining back-up data from the driver's and dispatcher's logs;
  - accounting to its internal financial management personnel on its transportation revenue and expenses;
  - maintaining all revenue and expenditure accounts not related to the coordination project.

During this process, the lead agency in cooperation with the participating agencies and funding organizations and with technical and citizen suggestions will produce:

- a worksheet for calculating charges and reimbursements,
- cost allocation guidelines,
- billing procedures, and
- revenue and expenditure accounts.

This step establishes policies and procedures for recording and reporting financial and related non-financial data and designates those responsible.

Records must be kept separately for the coordinated system. In a number of cases, the records will have been prepared by drivers and other staff from one of the participating agencies, but still must be kept (either as a copy or in the original) separately. Keeping these separate records is essential for:

- a. accounting to an agency's parent or umbrella organization,
- b. reporting to individual funding sources, and
- c. satisfying audit requests.

#### Policies for Record-Keeping

Policies will be needed to establish what and how information will be recorded, including:

1. Specifying what information will be collected:
  - in what form,
  - by whom,
  - how often, and
  - for what purpose; and
2. Determining the methods for storing that information:
  - using what filing system, and
  - for what length of time (for both active and inactive files).

#### Procedures for Record-Keeping

Procedures to implement those policies are:

- Modify existing forms and create new forms as needed. For example, see forms in Appendix D-7:
  - driver's log
  - monthly summary of trip statistics (3 forms)
  - monthly revenue and income reports
  - financial status reports
  - vehicle costs reports;
- Train staff in using the forms;
- Collect the specific data daily or as appropriate;
- Summarize the data monthly or annually as needed;
- Set up storage files;
- Store data;
- Report to funding organizations; and
- Respond to audit requests and report to funding sources.

## Responsibility for Record-Keeping

- Responsibilities of the lead agency with the aid of the participating agencies include:
  - modifying and creating forms;
  - assigning specific staff;
  - training staff;
  - collecting specific data;
  - maintaining files;
  - reporting; and
  - responding to audits

During this process, the lead agency, in cooperation with the participating agencies, will produce:

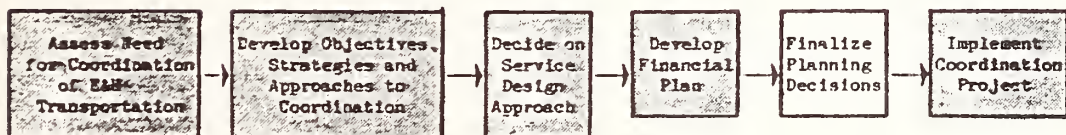
- data collection and reporting forms, and
- storage files.





---

## FINALIZING PLANNING DECISIONS





# 6

## FINALIZING THE PLANNING DECISIONS

### COMPONENTS OF THIS CHAPTER

#### Purpose

The purpose of this chapter is to describe the process of finalizing earlier planning decisions. The process allows the implementation effort to accommodate the existing organizational, operational, financial, and administrative realities of the participating agencies, thereby linking earlier planning decisions to the implementation process.

#### Content of the Chapter

This chapter is divided into six sections - each describing one of the choices to be finalized:

1. Coordination Approach
2. Participating Agencies and Their Roles
3. Lead Coordinating Agency
4. County Coordinating Committee and Its Role
5. Funding Sources
6. Service Characteristics

Each section describes the process of finalizing these decisions by summarizing choices, discussing the rationale for those choices, and clarifying expectations through an early forum for discussion.

### Basic Tasks

The process of linking the planning phase to the implementation activities would be conducted by an ad hoc committee. It might be an extension or modification of the study advisory committee or simply a congregation of participating agencies. This committee will synthesize the earlier planning choices into materials to be used by the coordinating staff in implementing the coordination project. The committee's basic tasks will be:

1. FINALIZING THE CHOICE OF COORDINATION APPROACH
  - a. formulate a precise definition of the approach
  - b. discuss how that definition is linked to the group's objectives
  - c. establish how the approach will be integrated with the existing services
  - d. discuss the practical limitations on the group's expectations
2. FINALIZING THE CHOICE OF PARTICIPANTS
  - a. specify the participants and their expected roles
  - b. establish the participants' adaptability and commitment to the coordination approach
  - c. define the level of participation of each agency
  - d. discuss what modification in service will be required of each participant and what benefits will be realized by each
3. FINALIZING THE CHOICE OF LEAD AGENCY
  - a. specify the lead agency and its expected role
  - b. establish the adaptability and commitment of that agency to the administration of the coordinated system
  - c. describe the flow of responsibility and the formal and informal relationship expected between the lead and other agencies
  - d. discuss how the agency chosen as lead will be expected to change.
4. FINALIZING THE CHOICE OF COUNTY COORDINATING COMMITTEE
  - a. describe the proposed composition, mission and function of the coordinating committee
  - b. discuss the level of autonomy they will be granted and the type and level of influence they are expected to have

## 5. FINALIZING THE CHOICE OF FUNDING SOURCES

- a. target potential funding sources and discuss the limitations and requirements each carries
- b. discuss the current use of particular funding sources, their current availability and the possibility of continued funding.
- c. specify the level of funding for administrative, capital and operating expenses

## 6. FINALIZING THE CHOICE OF SERVICE CHARACTERISTICS

- a. describe the service characteristics to be modified or established
- b. identify measures for the effect that these changes have on clients
- c. develop criteria for setting service standards

### Products

Products resulting from this process will be:

- a working definition of the coordination approach chosen
- a clear statement of the relationship between the objectives and the approach
- a list of participants with addresses and phone numbers
- a list of resources and staff specifying which agencies are contributing which resources
- an organizational chart
- an inter-organizational diagram
- a list of administrative tasks
- a list of possible advisory committee members
- a proposed mission and function statement of the Coordinating Committee
- a list of possible funding sources
- a list of current service characteristics and proposed modifications



This step provides the link between the general coordination approach chosen during the planning phase and the specific tasks to be assigned and scheduled in the implementation phase.

It is useful to begin by precisely defining the coordination approach, discussing its relationship to the overall coordination objectives and how that approach will affect existing services. This discussion process provides the foundation for later determining exactly what tasks will be necessary and in what order. The study advisory committee should provide a solid block of time for finalizing this choice. The committee and various technical advisory and interested groups or individuals should be invited. Proceed by summarizing the choice, discussing the rationale for that choice, and clarifying everyone's expectations through this early forum for discussion.

#### Summarize the Choice

There were three coordination approaches proposed in the planning phase. As defined in that process, those approaches are:

- Clearinghouse for Information on Transportation Services - this coordination approach involves both a formal cooperation among agencies and a passenger information and referral service. That cooperation may include sharing specific information on each transportation service, establishment of a clearinghouse newsletter, adoption of uniform data collection procedures, collaboration on grant applications, and encouragement to participants for sending representatives to other agency's policy board meetings. The passenger information and referral service may include establishment of a central phone number and preparation of passenger information materials. Except for the modifications just mentioned, each agency's transportation service remains essentially unaltered.
- Operational Clearinghouse for Transportation Services with Ride-Sharing and Time-Sharing - this coordination approach involves both resource and information exchange among agencies. That exchange may include sharing vehicles during normal down-time, "trading" passengers among agencies in cases where services overlap in a particular service area, working together to get better prices on vehicle repairs, parts, fuel, etc., establishing standardized training programs, developing a uniform preventive maintenance program, working together to negotiate uniform contracts with the same funding source, and developing uniform billing and accounting systems. The agencies maintain ownership of their individual vehicles and simply coordinate with the other agencies in performing a number of functions related to their operation.

- A Consolidation of Operations - this coordination approach involves a merger of the existing transportation services into one consolidated system. This may include incorporating a non-profit organization to operate the consolidated system, hiring an administrator, jointly leasing vehicles, establishing new service characteristics, establishing a central billing and accounting system, centralizing scheduling and dispatching, centralizing vehicle storage and maintenance, establishing common radio frequencies for all vehicles, creating a common logo, providing common training, establishing one vehicle replacement schedule, and centralizing marketing tasks. The agencies essentially dissolve their current transportation services by incorporating various elements of them into a consolidated system.

For each of those approaches the decision must also be made to expand or maintain current service levels. This is the time to make final adjustments or changes in the decisions regarding the approach, resource level, and objectives.

#### Discuss the Rationale for that Choice

During the planning phase, approaches were discussed in terms of what specific objectives they could achieve. To really understand how the coordination approach will affect service participants they must have those objectives in mind as they define the approach they have chosen. Those objectives may be any one or any combination of the following:

- Increase passenger trip-making,
- Fill service gaps,
- Expand service,
- Improve efficiency and effectiveness,
- Improve vehicle utilization,
- Improve management,
- Obtain non-transportation benefits,
- Reduce direct costs,
- Reduce overhead expenses,
- Avoid duplication of service, or
- Comply with regulations.

At this time, participants and the study advisory committee should suggest criteria for achievement of these objectives and possible measurement tools.

## Clarify Expectations

The process of finalizing the coordination approach gives the study committee a chance to clarify a number of things with the participating agencies. It allows formulation of a precise definition of the proposed approach. It also provides a discussion of how particular strategies (i.e., approaches) are linked to the groups objectives, and it also promotes discussion of the practical limitations on the group's expectations. This can be accomplished by posing a number of questions such as:

- What objectives are to be met, in what order, and within what time frame?
- What is the spirit of the effort - cooperation, resource sharing, or consolidation?
- How does the proposed coordination approach differ from the existing approaches?
- What plans are there for future efforts?
  - expand, limit, or reduce participation
  - moving to the next level of coordination (or remaining at the current level)
  - refining the current effort.

During this process, an ad hoc committee will produce:

- a working definition of the coordination approach chosen; and
- a clear statement of the relationship between the objectives and the approach

## THE FINAL PARTICIPANTS

This step provides the link from the choice of participating agencies and their roles made during planning phase to the specific contracts to be arranged in the implementation phase.

During the planning phase (as described in Chapter 3), preliminary decisions will have already been made covering a lead agency and potential participants. At this point, it will be important to become more specific about who the participants will be and what they will do. The study committee must also establish to what extent each agency will participate and what the costs and benefits of coordination will be to each. Perform this task by summarizing the choice, discussing the rationale for that choice and clarifying expectations through an early forum for discussion.

### Summarize the Choice

Participants will probably include social service agencies and governmental divisions or perhaps private, non-profit or private, for profit organizations. Their roles might include:

- taking the administrative lead,
- consolidating with others,
- financially coordinating,
- time and/or ride sharing,
- information sharing,
- donating resources,
- offering support, or
- providing consumer input.

This is the time to add or delete participants and to modify their roles if necessary.



## Discuss the Rationale for Those Choices

During the planning phase, participants were selected based on a number of criteria: comparability of service objectives, ability to address specific agency needs, adaptability of organizational structure and availability of other resources. Comparability between the system-wide coordination objectives and the specific service objectives of a given agency were considered, for instance:

- what client groups are emphasized;
- what origins and destinations are emphasized;
- what geographical area are emphasized;
- what non-transportation benefits are emphasized (e.g., mainstreaming or mobility or fighting isolation).

The ability of the coordinated system to address the specific needs of the agency was another consideration. Those needs may include 1) transportation needed to and from specific programs and facilities, 2) transportation needed during particular hours on particular days; particular equipment needed, and 3) staff sensitivity and specific emergency training (e.g., CPR, Red Cross, etc.) needed.

Another consideration was the adaptability of the organizational structure of the agency to a coordinated system. Elements of an adaptable structure may include:

- the chain of operational responsibility;
- the role of the board;
- the designation of transportation as a separate function
- the responsibility of the agency to an umbrella organization;
- the number, position, responsibilities and salaries of particular personnel; and
- the role of personnel as "pinch-hitters" on transportation functions rather than holding positions specifically relating to transportation.

The availability of resources needed by the coordinated system might also have been considered, including:

- office space and equipment;
- dispatching and scheduling equipment (two-way radios, telephones, etc.) storage facilities;
- maintenance facilities and tools; and
- fleet size, type, age, capacity, radio equipment, seating patterns and wheelchair capacity.



This discussion period should be used to emphasize what is expected from participants in terms of the adaptability, compatibility and availability described above.

#### Clarify Expectations Through an Early Forum for Discussion

This process of finalizing the choice of participants and their roles should also be used as a time to gather a complete list of agency information. This might include the agency's name, the name of their transportation service, the address and phone number and names and number of contact persons both administrative and operational. To further develop this early commitment from the participants, an organizational chart should be prepared showing all responsibilities and all links between participants. This is also the opportunity to prepare a checklist of resources and staff from each agency committed to the coordination project. These tasks can begin by clarifying the following areas:

- How many agencies will actually be participating and how many of their clients will be using the coordinated service;
- What the participants level of commitment will be;
- What resources have actually been committed to the coordination effort;
- What staff have been committed;
- What the flow of responsibility will be;
- What benefits will be realized to the individual agencies; and
- What modification will be required in the current day-to-day procedures of the existing services.

During this process, an ad hoc committee will produce:

- a list of participants with addresses and phone numbers;
- a list of resources and staff specifying which agencies are contributing which resources; and
- an organizational chart

This step provides the link between the choice of lead agency made in the planning phase and the specific administrative responsibilities and procedures to be established in the implementation phase.

It's essential to specify who the lead agency will be and what its role will be and to establish the level of commitment and the expected flow of responsibility. Start by summarizing the choice, then discuss the rationale for that choice and finally clarify expectations through an early forum for discussion.

#### Summarize the Choice of Lead Agency and Its Roles

The lead agency might be one of the participating agencies or an organization specifically created for this function. Their roles may include:

- updating and maintaining an inventory of services;
- developing contracts, setting rates and schedules;
- establishing administrative procedures;
- establishing operational procedures;
- managing the administrative staff;
- managing the operational staff;
- identifying and applying for new funds;
- working with agencies to identify transportation needs in the community;
- maintaining contact with agencies and with the public;
- reporting to the advisory committee; or
- conducting advisory committee meetings.

This is the time to reassign a lead agency if necessary and to modify the roles where appropriate.

#### Discuss the Rationale for Those Choices

When participants were invited to participate, the choice of a lead agency evolved. It depended on the adaptability of the agency's organizational structure for the administration of a coordinated system. Elements of an adaptable structure might include:

- the chain of responsibility;
- the role of the board;
- the responsibility of the agency to an umbrella organization;
- the designation of transportation as a separate function;
- the existence of a functioning citizen's committee;
- the number, position, responsibilities and salaries of administrative personnel.

It also depended on the availability of resources needed to administer the coordinated system including:

- office space and equipment
- personnel trained in managing a transportation service.

This process gives all the participants a clear explanation of why a particular agency was chosen as the lead and what their relationship to the lead will be (in addition to soliciting a commitment from the lead itself.)

#### Clarify Expectations through an Early Forum for Discussion

The process of finalizing the choice of the lead agency and more clearly defining its role provides a discussion of the administrative functions of the coordination project and the formal and informal links between the lead and other agencies. It also explores the responsibilities of the lead agency by estimated task hours and by designating needed staff. The following should be addressed:

- What administrative function will be performed;
- Where and by whom administrative functions will be performed;
- What resources have actually been committed to the coordination effort;
- What staff has been committed;
- What the flow of administrative responsibility will be;
- What the formal and informal links and relationships will be between the lead agency and the others; and
- What modifications will be required in the current day-to-day procedures of the existing services.

During this process, an ad hoc committee will produce:

- an inter-organizational diagram
- a list of administrative tasks with estimated time and staff needed.

This step provides the link between the general composition and mission of the committee as proposed during the planning phase and the official establishment and conduct of the coordinating committee during the implementation phase.

#### Summarize the Choice of Advisory Committee Composition and Mission

The composition of the committee is ideally 12-20 persons. Representatives probably will be invited from human service agencies, public transportation providers, and private transportation providers. It will probably also include other local financial supporters of transportation, and elderly and handicapped consumers.

The mission may include certain traditional objectives such as: keeping significant actors in the community informed at all times, obtaining the widest range of comments possible on the work performed by the staff, ensuring that a transition can actually be made from the "paper design" to an operational system; and guaranteeing that the system implemented has the greatest possible chance of success.

This is the time to reconstitute the study advisory committee as the Coordinating Committee, if appropriate, or to invite additional representatives or to modify an existing social service agency's advisory committee.

#### Discuss the Rationale for Those Choices

The coordinating committee will be similar to an existing committee in the structure and purpose and will acknowledge the interest expressed by particular groups or individuals. Its composition and mission should reflect a responsiveness to the goals and objectives of the coordination approach.

#### Clarify Expectations Through An Early Forum for Discussion

This process of finalizing the composition and mission of the coordinating committee begins with the following considerations:

- How representatives will be selected;
- Who will run their meetings;
- Who will provide informational material to them;
- What formal and informal channels they will have into the operational, financial and administrative decision-making process;
- What specific products and functions they will be responsible for; and
- Whether this will be an ad hoc or on-going committee

During this process, an ad hoc committee will produce:

- a list of possible members to invite;
- a proposed mission and function statement on the advisory committee.



This step provides the link between the choice of possible funding sources made in the planning phase and the actual contracted arrangements for funding to be made during the development of the financial plan.

It is necessary to target potential funding sources and discuss the limitations and requirements of each, and to discuss current agency transportation funds and the projected level of funding needed.

### Summarize the Choice of Funding Sources

- Sources might be Federal, state, local, regional, or private. These sources treat transportation as either a discrete service or a support service. Those sources may carry certain limitations or requirements on:
  - client eligibility criteria;
  - client certification and reporting
  - trip purposes;
  - origins and destinations;
  - geographical area;
  - vehicle equipment;
  - operating hours; and
  - client mix.

This is the time to initially approach known funding sources and to re-search other sources. Exhibit D-3 in Appendix D presents the characteristics of common funding sources for elderly and handicapped transportation in Wisconsin.

### Discuss the Rationale for Those Choices

Funding sources will be considered in terms of: current use by participating agencies; compatibility of funding limitations and requirements with current service characteristics; availability of the funds; and anticipation of continued funding.

## Clarify Expectations Through an Early Forum for Discussion

The process of finalizing the choice of funding sources provides an agenda of possible funding sources, the proposed funding levels sought from each source and the limitations and requirements attached. This includes posing the following questions:

- How will the funds be used, for example: administration, capital acquisitions, or operating expenses.
- How much funding is needed;
- How long will outside funding be needed;
- Will this funding expand service or merely maintain the current service level; and
- How will the limitations and requirements affect current service.

During this process, an ad hoc committee will produce:

- a list of possible funding sources, funding levels and attendant limitations or requirements.

## THE FINAL SERVICE CHARACTERISTICS

This step provides the link between the service approach proposed during the planning phase and the specific tasks required during the implementation phase for setting up operations.

The transition to actual implementation is smoother when the service characteristics to be modified or established are thoroughly discussed and when criteria for setting service standards and techniques for measuring the effects of change in service on clients are established.

### Summarize the Choice of Service Approach

Service characteristics and standards to be modified or established may include:

- service area
- eligibility criteria
- trip purposes
- origins and destinations
- operating hours
- fares
- driver work rules
- level changes
- service type(s)
- wait and ride times

This is the time to reevaluate any proposed additions, deletions or modifications and to present them clearly to all.

### Discuss the Rationale for Those Choices

The specifications of service characteristics are based on their: 1) reasonableness in view of the level of cooperation/coordination/consolidation desired by the participants; 2) compatability with goals and objectives of the coordination project; 3) compliance with limitations and requirements set by the proposed funding sources; and 4) tradition.

## Clarify Expectations Through an Early Forum for Discussion

The process of finalizing the service characteristics provides an examination of current service characteristics and a discussion of proposed changes including the expected impact of those changes.

- what specific service characteristics will definitely be retained and which may eventually be modified;
- how will the affect of the proposed modifications on current clients be measured;
- what criteria will be used to set the particular standards and characteristics, and
- how will the goals and objectives of the project be met by the proposed service characteristics.

During this process, an ad hoc committee will produce:

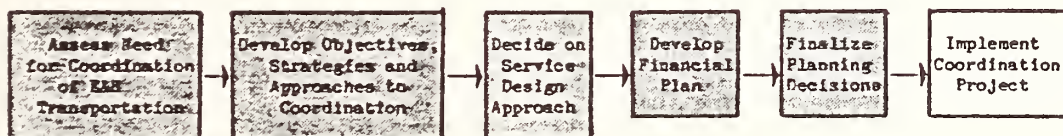
- a list of current service characteristics and proposed modifications.





# 7

## IMPLEMENTING THE COORDINATED PROJECT







## IMPLEMENTING THE SERVICE

### COMPONENTS OF THIS CHAPTER

#### Purpose

The purpose of this chapter is to describe the activities involved in establishing the coordinated system. These activities are presented for modifying existing service rather than creating a brand-new system. Participants should initially identify the coordinated system as a composite of the service characteristics of various existing systems. This ensures consideration of those elements of an existing service that an agency finds essential and discourages duplication of existing administrative and reporting procedures.

#### Content of the Chapter

This chapter is divided into four sections, each describing a group of implementation activities:

- Developing a Work Plan and Schedule
- Arranging Contracts
- Establishing System Characteristics
- Establishing Administrative and Operational Procedures

Each section describes the specified tasks for each of the three coordination approaches:

1. A Clearinghouse for Information on Transportation Services
2. An Operational Clearinghouse for Transportation Services with Ride-Sharing and Time-Sharing
3. Consolidation of Operations

### Basic Tasks

The lead agency will coordinate implementation activities. Some tasks will be delegated to the other participating agencies transportation providers or the advisory committee. In any case, the implementation should proceed with close communication between the lead agency and the others. All of the products from the "decision-finalizing" process described in Chapter 6 will be useful during the implementation process.

Basic tasks in implementing the service are:

1. DEVELOPING A DETAILED WORK PLAN AND TIME SCHEDULE
  - a. Establishing milestones and a general time frame.
  - b. Identifying the tasks necessary for accomplishing each milestone.
  - c. Establishing target dates for each milestone.
  - d. Specifying the person hours needed per task (or at least per milestone)
  - e. Diagramming a project schedule by task and time.
  - f. Distributing the schedule.
  - g. Modifying the schedule as needed.
2. MAKING CONTRACTUAL ARRANGEMENTS
  - a. Preparing formal agreements among participants
  - b. Soliciting letters of support from local officials and other interested individuals and groups in the community
  - c. Contracting with the transportation providers, if it's not one of the participating agencies
  - d. Incorporating a new operating administrative agency if necessary
3. ESTABLISHING SYSTEM CHARACTERISTICS
  - a. Referring to the list of system characteristics of the existing agency transportation services
  - b. Specifying modifications to existing system characteristics
  - c. Set service standards
  - e. Establishing criteria for evaluating the impact of those modifications on agency clients.

#### 4. Establishing Administrative and Operational Procedures

- a. Hiring staff
- b. Purchasing vehicles and equipment
- c. Allocating resources
- d. Setting up communications among participating agencies (including constituting a coordinating committee)
- e. Negotiating work rules
- f. Establishing process for seeking funds
- g. Marketing the service
- h. Certifying and processing clients
- i. Establishing schedules and routes
- j. Setting up the clearinghouse, brokerage, or dispatching system, as appropriate
- k. Performing preventive maintenance and repairs
- l. Training drivers
- m. Collecting fares

#### Products

- A detailed work plan, task by task
- An implementation schedule
- Statements of support
- Letters of agreement
- Articles of incorporation
- Contracts (with providers)
- Client certification process documents
- Service standards document
- Work rules
- Job descriptions



This step describes the implementation tasks and establishes a time schedule for each task.

It is important to begin the implementation process by developing a detailed work plan and time schedule. They may well be altered as operations get under-way, but provide an essential framework for a smooth start-up. Each task should be described with all the earlier, planning decisions in mind. The process will be the same for all three coordination approaches. Developing a work plan and time schedule involves the following steps, regardless of which coordination approach is used.

- Establish milestones and time frame - Milestones are the major divisions of tasks required to implement a particular system. The major divisions will, of course, depend on which coordination approach is chosen. The milestones should be established within a general time frame, probably either 1 year, 18 months or 2 years. Milestones generally include:
  - Finalizing planning decisions
  - Preparing a financial plan and seeking funds
  - Constituting a coordinating committee
  - Making contractual arrangements
  - Specifying service characteristics
  - Hiring staff and negotiating work rules
  - Purchasing office space, equipment and supplies
  - Purchasing or leasing vehicles and equipment
  - Allocating resources
  - Establishing schedules and routes and the dispatching system
  - Training drivers
  - Certifying and processing clients
  - Setting up collection procedures
  - Marketing the service
- Identify tasks, target dates and person hours - The remaining sections in this chapter suggest tasks for the various milestones. Be sure to include administrative and supervisory personnel and their time and any meeting or training time needed.
- Diagram a project schedule - The schedule will generally take the following form:

Tasks	Person 1's Hours	Persons 1's Role	Persons 2's Hours	Persons 2's Role	TOTAL HOURS
1. Milestone 1.1 Task 1 of Milestone 1 1.2 Task 2 of Milestone 1					
2. Milestone 2.1 Task 1 of Milestone 2 2.2 Task 2 of Milestone 2 . . .					

- Distribute the Schedule and Modify as Needed - All participants, transportation providers and funding agencies should have an opportunity to see, discuss and modify the plan both before it is actually used and periodically throughout the implementation.

This process will produce a detailed work plan and schedule.

## CONTRACTS

This step establishes the contractual arrangements among participating agencies and with various transportation providers.

Formal agreements among participants are necessary. These obligate the participants to perform specific functions and to contribute to a particular coordination project.

There are four types of contractual arrangements, and the choice of coordination approach determines which are appropriate. Those types are:

- agreements among participants (both letters of support and signed contracts),
- letters of support,
- contracts with outside transportation providers,
- articles of incorporation

### Clearinghouse for Information

This approach requires only two types of contractual arrangements - agreements among participants and letters of support. Examples of the agreement between participants are in Appendix G-1 and G-2. They will include:

- designation of what information will be brokered by the clearinghouse;
- specification of shared efforts such as:
  - joint grant applications
  - central information number
  - joint marketing and outreach
  - having representatives on the other agencies' planning committees; and
- agreement on the level of effort expected regarding uniformity in areas such as:
  - rate and reimbursement calculation,
  - setting up specific cost categories, and
  - record-keeping requirements

Examples of letters of support are in Appendix G-3. These are not technically contractual agreements, since the initiator of the letter doesn't agree to undertake specific tasks or perform a particular role. Rather, the letter suggests an offer of general cooperation in bringing a coordinated system to the community. This cooperation might be sought from:

- local officials,
- the advisory committee,
- community interest groups,
- consumers, and
- non-participating agencies

## Operational Clearinghouse

This approach requires the same two types of contractual arrangements. Letters of support might be sought from the same groups and individuals. Agreements among participants would be contracts, for both agencies providing service, and those purchasing services. In the operational clearinghouse, those agreements are much more specific in nature than the interagency agreements developed under the information clearinghouse. The contracts will include

- specifications for services to be provided or purchased
- special services to be provided to users
- liability assignments
- cost reimbursement provisions
- accounting and record-keeping provision
- conditions/procedures for accepting requests for service from agencies and users
- user eligibility/certification procedures
- subcontracting provision

## Consolidation

This approach may require all four arrangements. Letters of Support would be the same as those sought with the other two approaches. Contracts among participants would be needed. In addition, the lead agency might contract out for provisions of service with another transportation provider which would require a contract. In addition, if a new non-profit corporation is established to be the lead agency for the project, then articles of incorporation are needed for that corporation. An example of Articles of Incorporation is in Appendix E-4. Contracts for agencies consolidating service would include:

- services to be provided
- special services to users
- leasing agreements on equipment
- liability assignments
- maintenance responsibility
- user eligibility/certification
- direct cost charges and method of calculation
- subcontracting provision
- accounting, record-keeping and reporting provision.

During this process, the participating agencies with help from legal and technical advisors may produce:

- Contracts of agreement among participants
- Transportation providers contracts
- Letters of support, or
- Articles of incorporation.

## SYSTEM CHARACTERISTICS

This step establishes system characteristics and provides formal consensus among participating agencies on the coordinated system's characteristics.

### Clearinghouse for Information

The new coordinated system will initially be defined as a composite of existing agency systems and modified as needed. Thus, the first step will be to refer to the list of current service characteristics prepared in the process described in Chapter 6 on finalizing service characteristics. For the Clearinghouse for Information, transportation system characteristics of the participating agencies would remain unchanged.

The clearinghouse would simply provide information on each agency's particular characteristics, for example:

- service area
- eligibility criteria
- operating hours
- fares
- level of driver assistance
- level changes (e.g., door-to-door)
- type of service (e.g., demand-responsive)
- fleet composition and deployment
- drivers
- escort policy

### Operational Clearinghouse

This approach would also begin with a reference to the list of current service characteristics and proposed modifications prepared in the steps described in Chapter 6.

Participating provider agencies might modify selected service characteristics to accommodate the service needs of the participating purchaser agencies. The most likely modifications would be in the service area, operating hours and vehicle deployment.

Service area could be modified by:

- expanding the service area to include a small additional area which is contiguous to the current service area, or
- making exceptions to the current service area boundaries to provide service to a few particular origins and destinations outside the current boundaries



Operating hours could be modified by:

- extending the hours at either or both the beginning or end to accommodate certain trip purposes (for example - work trips), or
- providing limited service, on weekends, holidays, evenings, or during other time slots not normally served, to accommodate certain trip purposes

And deployment of vehicles could be modified by:

- redistributing particular vehicle sizes (e.g., station wagons, big buses, vans, etc.) and special equipment (i.e., lifts and radios) to accommodate the "new clients" as needed.

### Consolidation

The consolidated system would require a specific set of system characteristics unique to the new service. These might include modifications of the characteristics of the various participating agencies or might involve creation of a completely new service.

During this process, all participating agencies, coordinated by the lead agency, will produce a list of finalized system characteristics (including both modifications to existing services and newly established service characteristics.)

## ADMINISTRATIVE AND OPERATIONAL PROCEDURES

This step provides the basis for starting the new services.

### Clearinghouse for Information

This approach is two-fold and may involve a number of procedures for each aspect. The two aspects of the clearinghouse are cooperation among agencies and information and referral services to passengers.

- Formal cooperation among agencies - The participating agencies would agree to share specific information with each other on their transportation services. That sharing might be established by publishing a periodic clearinghouse newsletter and by encouraging participants to send representatives to other agencies' policy board meetings. Their cooperation might extend to the use of uniform data collection procedures and joint preparation of grant applications.
- Passenger information and referral -- This could include the establishment of a central phone number and the use of one single passenger information brochure on the various services participating.

### Operational Clearinghouse

Two types of agencies will be involved in the clearinghouse: the providers and the purchasers. The clearinghouse will keep an inventory of service characteristics of the providers and match requests for service from the purchasers with available unused capacity.

The establishment of the clearinghouse involves the following steps:

1. Update the inventory of transportation providers concentrating especially on vehicle operations: when the vehicles are being used, specific routes and schedules, and the load rates on the vehicles.
2. Identify and contact potential purchasers.
3. Contact potential providers and establish cost reimbursement arrangements (including equitable costs, billing and reporting procedures, etc.)
4. Develop contracts between the agencies and the clearinghouse either for the provision of transportation services or the purchasing of transportation services.
5. Establish administrative procedures for management of the clearinghouse including requests for service and user relations.

## Contracts

There will be two types of contracts between agencies and the clearinghouse: one for providers and one for purchasers. Each type of contract will include the following provisions:

- specifications for services to be provided or purchased
- special services to be provided to users
- liability assignments
- cost reimbursement provision including charges and method of calculation
- accounting and record-keeping provisions
- conditions/procedures for accepting requests for service from agencies and users
- user eligibility/certification procedures
- subcontracting provision
- other standard contract provisions

Actual ride-sharing and time-sharing will be decided on a request-by-request basis, at the discretion of the provider agency.

## Routes and Schedules

The process for establishing the detailed routes and schedules involved in time- and ride-sharing is as follows:

1. Map out the times of the day by vehicle when the different vehicles are in use. This should include how many people are being carried during those times.
2. Map out the times of the day, number of persons, and the general service areas (origins and destinations) for services that are needed by agencies and organizations which are able to purchase transportation services.
3. Identify specific unused time in vehicle. Identify (by vehicle) the times of the day when vehicles are not being used by their respective organizations and could be used by others. Using the identification from above of which organizations have use for the vehicles at those times, make the match and schedule the unused time on the vehicles.
4. Identify specific unused capacity in vehicles. Identify (by vehicle) the times of the day and general service areas where the vehicles have unoccupied seats. Then, using the identification from above of organizations which need service and are able to purchase it (either for clients or for the general elderly and handicapped population), match unused capacity to need and schedule the appropriate trips.

If fixed schedule service is needed, and unused capacity is available from an existing fixed schedule service, then the needed trips can be readily matched with the existing service. If there is unused capacity on a fixed schedule service, but demand responsive service is needed, then the capacity to dispatch vehicles will have to be developed. If both the need and the excess capacity are on a demand responsive basis, then the project will need to improve the management and dispatching of the existing service to allow for the unoccupied vehicles to be filled.

Figures 7-1 through 7-4 illustrate an analysis procedure developed\* to assess the potential for time sharing and ride-sharing. It is possible to use the same procedure here to develop more detailed routes and schedules.

#### Coordinated Maintenance

The vehicles involved in the clearinghouse operation could also be involved in a coordinated maintenance program. The establishment of a coordinated maintenance and purchasing program involves the development of contracts to purchase gas, oil, parts, and maintenance services in volume and consequently at a lower rate.

The steps required to undertake this activity are as follows:

1. Contact agencies which operate vehicles.
2. Update inventory of vehicles including condition and the need for current repairs.
3. Develop specifications for bulk purchasing contract and contact potential providers (i.e., county, local-garage, wholesalers).
4. If purchasing from wholesaler, decide where to store fuel and establish procedure for dispensing fuel, oil and supplies. If purchasing from county, establish procedures for dispensing fuel, oil and supplies.
5. Develop specifications for maintenance contract and approach prospective contractors (county garage, local private garages).
6. Solicit bids and select a provider/contractor for the maintenance services.
7. Prepare a maintenance schedule for each vehicle and establish responsibilities and procedures for carrying out maintenance on vehicles (including schedules for vehicle inspection).
8. Establish payment arrangements including accounting and billing for the services.

---

\*Applied Resource Integration, Ltd., and the Social Services Research Institute Planning Guidelines for Coordinated Agency Transportation Services, prepared for the Department of Health, Education, and Welfare, April 1980.







TRANSPORTATION PROVIDERS	TRANSPORTATION NETWORK WITH TIME-SHARING										Block Periods of Need (Met or unmet Needs)	
	Met Transport Need	Unmet Transport Need	Available Vehicle (or Seat)	Unmet Transport Need	Unmet Transport Need	Unmet Transport Need	Unmet Transport Need	Unmet Transport Need	Unmet Transport Need	Unmet Transport Need	Individual Service	Individual Service
WORKSHOP (12 Passenger Van) TITLE III	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service
HEADSTART (25 Passenger Bus)	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service
PUBLIC OPERATOR (15 Passenger Bus) SPECIAL EFFORTS	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service
NUTRITION												
MEDICAID	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service

Figure 7-2: AGENCY TRANSPORTATION NETWORK WITH TIME-SHARING

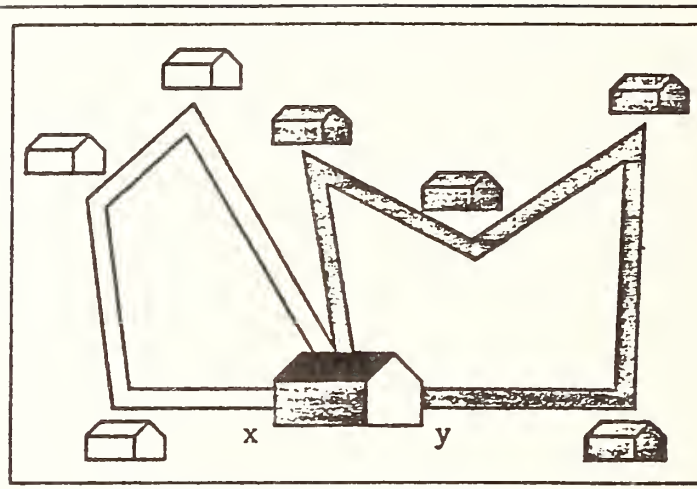
Source: Applied Resources Integration, Ltd., Planning Guidelines for Coordinated Agency Transportation Services, prepared for the U. S. Department of Health, Education, and Welfare, April 1980, prepared in conjunction with Social Service Research Institute.

TRANSPORTATION PROVIDERS	TRANSPORTATION PURCHASERS	AGENCY TRANSPORTATION NETWORK WITH FULL COORDINATION										Block Periods of Need (Met or unmet Needs)	
		Met Transport Need	Unmet Transport Need	Available Vehicle (or Seat)	Unmet Transport Need	Available Vehicle (or Seat)	Unmet Transport Need	Available Vehicle (or Seat)	Unmet Transport Need	Available Vehicle (or Seat)	Unmet Transport Need	Available Vehicle (or Seat)	Unmet Transport Need
WORKSHOP (12 Passenger Van) TITLE III		Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service
HEADSTART (25 Passenger Bus) NUTRITION		Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service	Group Service
PUBLIC OPERATOR (15 Passenger Bus) SPECIAL EFFORTS MEDICAID		Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service	Individual Service

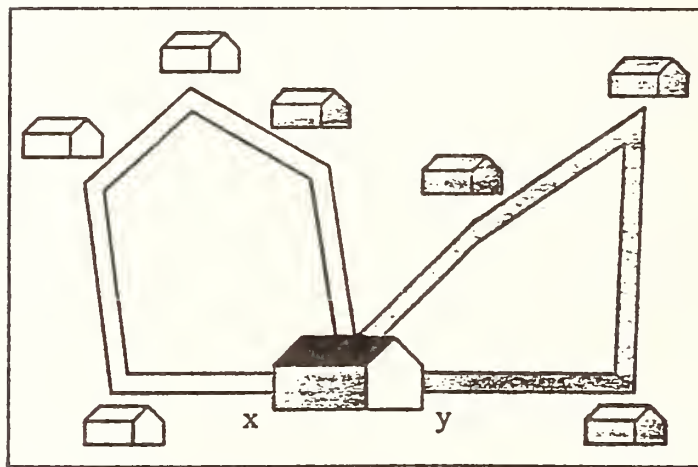
Figure 7-3: AGENCY TRANSPORTATION NETWORK WITH FULL COORDINATION

Source: Applied Resources Integration, Ltd., Planning Guidelines for Coordinated Agency Transportation Services, prepared for the U. S. Department of Health, Education, and Welfare, April 1980, prepared in conjunction with Social Service Research Institute.





Vehicle Tour Before Ride-Sharing.



Vehicle Tour After Ride-Sharing.

Figure 7-4 : Example of Ride-Sharing

## Other Shared Functions

In addition, participating agencies might agree to work together to negotiate contracts with the same funding source and to develop a uniform billing and accounting systems among themselves.

## Consolidation

The implementation of this operational concept would mean that the operational functions and most administrative functions would be handled by a lead consolidating agency. The financial components could be handled either by each agency individually or through the integration of funds from the state and Federal levels. If funds were not integrated and consolidation was being pursued, then each individual agency would retain the responsibility for reporting and justifying transportation expenditures to their funding sources. If funds were integrated, the lead agency would be responsible for this administrative function. The consolidation approach includes the following components:

1. Incorporating a coordinating agency, if necessary, or designating a participating agency as lead agency and consolidating all management functions under that entity,
2. Hiring an administrator, see Appendix E-5 for a sample job description,
3. Jointly leasing vehicles,
4. Jointly purchasing insurance coverage (see Appendix E-6),
5. Establishing modified service characteristics (see the description for the Time- and Ride-Sharing Approach in the earlier section of this chapter, on service characteristics),
6. Centralizing maintenance and purchasing (see description of coordinated maintenance for the Time- and Ride-Sharing Approach in this chapter),
7. Establishing a central billing and accounting system,
8. Centralizing vehicle storage (see Appendix E-7),
9. Creating central dispatching, and scheduling (see Appendix E-8),
10. Establishing common radio frequencies,
11. Creating a common logo,
12. Providing common driver training (see Appendix E-9),
13. Establishing one vehicle replacement schedule,
14. Centralizing marketing (see Appendix E-10).





## BIBLIOGRAPHY



## BIBLIOGRAPHY

### I. KEY REFERENCES

#### General

Transportation Research Board, Fourth National Conference on Rural Public Transportation: Proceedings, prepared for the Urban Mass Transportation Administration, U.S. Department of Transportation, Washington, D. C., April 1980.

Transportation Research Board, Rural Public Transportation, Transportation Research Record 696, Washington, D.C., 1978.

Transportation Systems Center, Rural Passenger Transportation Primer, U.S. Department of Transportation, Cambridge, Massachusetts, January 1977.

#### Coordination

Applied Resources Integration, Ltd. and Special Services Research Institute, Implementation Guidelines for Coordinated Transportation Services, prepared for U.S. Department of Transportation and U.S. Department of Health, Education and Welfare, April 1980.

Applied Resources Integration, Ltd. and Social Services Research Institute, Planning Guidelines for Coordinated Agency Transportation Services, prepared for U.S. Department of Transportation and U.S. Department of Health, Education and Welfare, April 1980.

Applied Resources, Ltd., Rural Public Transportation Coordination Efforts, Technical Manual Services, prepared for the Federal Highway Administration, U.S. Department of Transportation, Washington, D.C., August 1978.

Jon E. Burkhardt, Sue F. Knapp and Mark J. Ramsdell, Coordinated Transportation Demonstration Results, prepared for Office of Human Development Services, U.S. Department of Health, Education and Welfare, by Ecosometrics, Inc., Bethesda, Maryland, February 1980.

Carter-Goble-Robert, Inc., Planning and Coordination Manual, prepared for the U.S. Department of Health, Education and Welfare and U.S. Department of Transportation, Columbia, South Carolina, January 1979.

Dolores A. Cutler, Coordinating Transportation Services for Elderly and Handicapped, Volume I: Statutory and Regulatory Analysis of Incentives and Barriers to Coordinating Transportation Services for the Elderly and Handicapped, prepared for the Office of the Secretary, U.S. Department of Transportation by Ecosometrics, Inc., Bethesda, Maryland, January 1979.

Institute of Public Administration, Planning Handbook: Transportation Services for the Elderly, prepared for the Administration on Aging, U.S. Department of Health, Education and Welfare, 1976.

Sue F. Knapp, Coordinating Transportation Services for the Elderly and Handicapped, Volume 2: A Model Uniform Billing and Accounting System for Coordinated Transportation Systems, prepared for U.S. Department of Transportation, by Ecosometrics, Inc., January 1979.

United States General Accounting Office, Hindrances to Coordinating Transportation of People Participating in Federally Funded Grant Programs, Volume I, Report of the Comptroller General of the United States, October 1977.

#### Systems Design and Management

Jon E. Burkhardt, Planning Rural Transportation Systems: Technical Manual Series, prepared for the Federal Highway Administration, U.S. Department of Transportation, Washington, D.C. August 1979.

Crain and Associates, Incidence Rates and Travel Characteristics of the Transportation Handicapped in Portland, Oregon, prepared for the Columbia Region Association of Governments (CRAG), April 1977.

Florida Department of Transportation, Marketing Rural Public Transportation, Technical Manual Series, prepared for the Federal Highways Administration, U.S. Department of Transportation, Washington, D.C., August 1979.

Jack Hayes, Rural Public Transportation Vehicles, Technical Manual Series, prepared for the Federal Highway Administration, U.S. Department of Transportation, Washington, D.C., August 1979.

Robert McGillivray, Ulrich Ernst, Mary Lou Olsson, and Francino Tolson, Rural Public Transportation Services and Performance, Technical Manual Series, prepared for the Federal Highway Administration, U.S. Department of Transportation Washington, D.C., August 1979.

Michigan Small Bus Program Management Handbook, Bureau of Urban and Public Transportation, Michigan Department of State Highways and Transportation, Lansing, Michigan, June 1978.

#### Funding

Alice E. Kidder, Sources of Non-Federal Support for Public Transportation Programs in Non-Urbanized Areas, prepared for Urban Mass Transportation Administration by North Carolina A&T State University, Greenboro, North Carolina, June 1980.

#### Evaluation

Jon E. Burkhardt, Results of the Rural Highway Public Transportation Demonstration Program, prepared for the Federal Highway Administration, U.S. Department of Transportation by Ecosometrics, Inc., Bethesda, Maryland, January 1980.



## II. ADDITIONAL REFERENCES

### General

William G. Bell and William T. Olsen (eds.), Proceedings of the Fourth Annual Transportation Conference, Florida State University, Tallahassee, Florida, December 1974.

Crain and Associates (eds.), Transportation Problems of the Transportation Handicapped, Vol. I: The Transportation Handicapped Population, Definitions and Counts; Vol. II: The Roles of Government and the Private Sector in the Provision of Mobility Systems for the Transportation Handicapped, Vol. III: Alternative Planning Methodologies, and Vol. IV: Transportation Solutions for the Handicapped, prepared for UMTA, U.S. Department of Transportation, Washington, D.C., August 1976.

Institute of Public Administration, Transportation for Older Americans, prepared for the Administration on Aging, U.S. Department of Health, Education, and Welfare, April 1975.

Institute of Public Administration, Transportation for the Elderly: The State of the Art, prepared for the U.S. Department of Health, Education, and Welfare, Office of Human Development, Administration on Aging, January 1975.

Ira Kaye, "Transportation Problems of the Older American in Rural Areas," in Rural Development, a report printed for use of the United States Senate on Agriculture and Forestry, United States Printing Office, Washington, D.C., 1972.

James G. March and Herbert A. Simon, Organizations, John Wiley & Son, Inc., New York, 1958.

Douglas McKelvey (ed.), Proceedings from the First National Conference on Rural Public Transportation, North Carolina A&T State University for U.S. Department of Transportation, October 1976.

James Miller and Sharman Mullen (eds), Proceeding from the Second National Conference on Rural Public Transportation, Pennsylvania State University for U.S. Department of Transportation, June 1977.

Transportation Research Board, Paratransit: 1979 Proceedings of a Workshop, Special Report No. 186, National Academy of Sciences, Washington, D.C., 1979.

Transportation Research Board, Improving Transportation Services for the Elderly, the Handicapped and the Disadvantaged, Transportation Research Board Record No. 660, Washington, D.C. 1977.

Transportation Systems Center, Rural Public Transportation State-of-the-Art Overview, U.S. Department of Transportation Technology Sharing Program, Cambridge, Massachusetts, October 1976.

Harold Seidman, Politics, Position and Power: The Dynamics of Federal Organization, New York, Oxford University Press, 1975.

## Coordination

Jon E. Burkhardt, "Coordinated Transportation Systems: Potential Cost and Benefits", paper presented at the Fourth National Conference on Rural Public Transportation, Vail, Colorado, June 1979.

Dolores A. Cutler, "Statutory Barriers to Coordination", paper prepared for the Third National Conference on Rural Public Transportation, Houghton, Michigan, June 1978.

Frank Davis and Tim Cleary, "The Transportation Coordination Dilemma", paper presented at the Fourth National Conference on Rural Public Transportation, Vail, Colorado, June 1979.

Alice Garland and Michael Eberlein, "Coordination at the State Level: Approaches and Importance," paper presented at the Fourth National Conference on Rural Transportation, Vail, Colorado, June 1979.

John W. Huddleston (ed.), Proceedings of the Southwest Conference on Coordinating Mobility Programs for the Transportation Disadvantaged, prepared by University of Texas at Austin, December 1977.

Institute of Public Transportation, Statewide Study of the Feasibility of Coordinating Specialized Transportation Services, prepared for the New York State Department of Transportation, Albany, New York, October 1978.

Norman Ketola, "Assessing the Potential for Coordination", paper presented at the Fourth National Conference on Rural Public Transportation, Vail, Colorado, June 1979.

Michigan Department of State Highway and Transportation, Client Transportation and Services Coordination in Michigan, Lansing, September, 1978.

William Osborne, "Coordination of Multipurpose Rider Transportation", paper presented at the Fourth National Conference on Rural Public Transportation, Vail, Colorado, June 1979.

Joseph Revis, "Coordination, Costs and Contracting Transportation Services", paper presented at the Third National Rural Conference on Rural Public Transportation, Houghton, Michigan, June 1978.

Joseph S. Revis, et al., Coordinating Transportation for the Elderly and Handicapped: A State-of-the-Art Report, prepared for the Urban Mass Transportation Administration by the Institute of Public Administration, November 1976.

Arthur Saltzman, Coordination of Transportation by Human Service Agencies: An Interorganizational Perspective, prepared for the University of California, Irvine, distributed by U.S. Department of Transportation Technology Sharing Program, January 1980.

V. Clayton Weaver, "Human Service Agency Transportation Coordination: An Evaluation Method," paper presented to the 59th Annual Transportation Research Board Meeting, Washington, D.C., January 1978.

## Systems Design and Management

Ronald Briggs, Characteristics of Local Passenger Transportation Providers in Texas, Texas Department of Community Affairs, Austin, Texas, 1977.

Jon E. Burkhardt and Armando M. Lago, "Predicting Rural Transit Demand" prepared for the Rural Public Transportation Conference for Legal Services Corporation, March 1980.

Walter L. Cox and Sandra Rosenbloom, Social Service Agency Transportation Services Current Operations and the Potential for Increased Involvement of the Taxi Industry, Center for Highway Research, University of Texas at Austin, August 1977.

Frank Davis, et al., The Social Service Insurance Dilemma: Problems, Analysis and Proposed Solutions, University of Tennessee for U.S. Department of Transportation, October 1978.

Terrence L. Fritz, "Private Enterprise Techniques to Improve the Productivity of Public Transit in Iowa", paper presented to the Third National Rural Transportation Conference, Houghton, Michigan, June 1978.

Frank J. Groschelle, et al., Transportation Authorities in Federal Human Services Programs, Office of Regional Director, (Region IV), U.S. Department of Health, Education, and Welfare, January 1976.

Kathy Hart, How to Set Up a Local Public Transportation Service in Your Community, Council of Fresno County Governments, Fresno, California, September 1975.

Ronald Kirby, Kiran Bhatt, Michael Kemp, Robert McGillivray and Martin Wohl, Para-Transit: Neglected Options for Urban Mobility, The Urban Institute, Washington, D.C.

William W. Millar and William R. Kline, "Operating Costs and Characteristics of Selected Specialized Transportation Services for Elderly and Handicapped Persons in Rural and Urban Areas", in Proceedings of the Transportation Research Forum XVII:I, Oxford, Indiana, 1976.

Subhash Mundle and Walter Cherwony, "Diagnostic Tools in Transit Management", paper presented at the 59th Annual Meeting of the Transportation Research Board, Washington, D.C., January 1980.

Public Technology, Inc., Elderly and Handicapped Transportation: Eight Case Studies, prepared for the Urban Mass Transportation Administration and the Office of the Secretary, U.S. Department of Transportation, September 1979.

Public Technology, Inc., Elderly and Handicapped Transportation: Local Government Approaches, prepared for the U.S. Department of Transportation, Washington, D.C. March 1979.

North Central Texas Council of Governments, Transportation Options for the Elderly and Handicapped, North Central Texas Council of Governments Transportation Department, Dallas, Texas, September 1976.



Transportation Research Board, Paratransit, Transportation Research Board Special Report #164, Washington, D.C., 1975.

U.S. Department of Transportation, Urban Mass Transportation Administration, Small City Transit Characteristics: An Overview, United States Department of Transportation, Urban Mass Transportation Administration, March 1976.

### Funding

U.S. Department of Transportation, Federal Highway Administration, "Public Transportation for Non-Urbanized Areas: Emerging Regulation and Request for Comment", in Federal Register, Vol. 43, No. 240, Wednesday, December 13, 1978.

### Evaluation

Jon E. Burkhardt, et al., Evaluation of the Office of Human Development Services Transportation Demonstration Program: Results of the First Year's Activities, prepared by Ecosometrics, Inc., for the Office of Human Development Services, U.S. Department of Health, Education, and Welfare, February 1979.

Douglas McKelvey, "Evaluating Rural Public Transportation", North Carolina A&T State Univeristy, Office of University Research, February 1977.





APPENDIX A

EXAMPLES OF ELDERLY AND HANDICAPPED  
TRANSPORTATION COORDINATION IN WISCONSIN



## APPENDIX A

### EXAMPLES OF E&H TRANSPORTATION COORDINATION IN WISCONSIN

#### Outagamie County Demonstration Project

In 1978 the Eastern Regional Coordinating Council used monies provided by the local Area Agency on Aging to fund a \$31,000 demonstration project to coordinate elderly and handicapped transportation services in Outagamie County. Direction for the project is provided by a local Transportation Policy and Planning Committee which includes representatives of county agencies with transportation concerns plus the County Executive and a County Supervisor. The primary goal of the project is to increase the efficiency and effectiveness of E&H transportation by reducing duplication of service and maximizing the use of existing resources.

In attempting to reduce duplication of services three possibilities have been identified. First, transportation for the Oneida Indian Reservation may be improved by a client referral system and by consolidation of current and proposed transportation providers. Second, the Dial-A-Bus service provided by Red Cross within the service area of the local bus system in Appleton (Fox Valley Transit) could be reoriented to serve the non-ambulatory within the bus service area and the general E&H population in the rural areas. Third, opportunities exist for consolidating fixed route services needed by handicapped school children and 51 Board clients in rural areas.

In order to maximize the use of existing resources, changes in operating procedures that should improve vehicle productivity have been suggested to Red Cross. The County has agreed to consolidate its gasoline purchases with Red Cross and the potential for purchase of surplus county

equipment by Red Cross is being explored. Finally, all E&H transportation contracts and agreements between the county and transportation providers are being examined in terms of the potential for route consolidation and service reorientation.

#### Racine County-Integration of Service under Lincoln Lutheran

Lincoln Lutheran Specialized Transportation (LLST), providing service to the elderly and handicapped residents of Racine County, is a successful example of county-wide coordination of specialized transportation funds.

The process of integrating specialized transportation funds began in 1975. By special request of the Common Council of Racine and the Racine Community Developmental Disabilities Services Board, the Racine County Planning Council began efforts leading to the coordination of all specialized transportation in the county. Following documentation of the resources available for specialized transportation as well as the client needs of agencies, the Planning Council developed a number of alternative plans for providing coordinated specialized transportation. Study of the alternatives resulted in an actual proposal for coordination. Specifically, the proposal called for:

- 1) the pooling of all available resources, including the resources of the City of Racine, Lincoln Lutheran of Racine, the Area Agency on Aging, and the Developmental Disabilities Services Board.
- 2) the designation of Lincoln Lutheran of Racine as the primary service provider, and
- 3) the leasing of wheelchair lift equipped buses owned by the City of Racine to Lincoln Lutheran of Racine for a nominal fee.

All of the parties involved approved the proposal by February 1976 and service by Lincoln Lutheran Specialized Transportation (LLST) began on March 1st.

Lincoln Lutheran Specialized Transportation subcontracts for transportation service from two private transportation companies. Vehicles used are fully accessible to all eligible physically handicapped and the developmentally disabled. The types of service provided are advanced reservation door-to-door service throughout the county, and demand responsive door-to-door within the City of Racine. Mass Transit Service Area. LLST currently operates 217 vehicle hours per week in Eastern and 120 vehicle hours per week in Western Racine County.

Funding for the service is provided jointly through the 85.08(5), 51.437, and Title XX, XIX and III-B programs. Also contributing are Racine County, the City of Racine, and the Wisconsin Division of Vocational Rehabilitation (DVR). Titles XIX and XX and the DVR program are billed monthly for service on a per ride basis, with DVR paying a flat rate of \$4 for a one-way ride and Titles XIX and XX paying actual costs. The other funding sources are billed monthly on a one twelfth of total yearly allocation basis. Reporting procedures are standardized for all clients of the various programs. Data recorded for each trip includes mobility of client, age, residence, trip purpose, and source of billing.

The service is monitored by the LLST Review and Evaluation Committee, which continually reviews proposals for new services and offers assistance to those agencies providing services to their clients. Racine County has in essence moved beyond the point of coordination to that of integrating specialized transportation through LLST.





APPENDIX B

MATERIALS USED IN THE  
ASSESSMENT OF THE NEED FOR COORDINATION



# *Public Health Statistics Wisconsin - 1976*

Published By Division of Health  
Department of Health and Social Services

Address Inquiries To:  
Bureau of Health Statistics  
Section of Statistical Services  
P.O. Box 309, Madison, Wisconsin 53701  
Phone: (608) 266-1939

Published: 1978

## INTRODUCTION

The Bureau of Health Statistics of the State Division of Health is charged by law with the dual responsibility of maintaining an effective system of vital registration and of making vital statistics available to public and private agencies and to the public at large. Within the Division of Health these statistics are necessary for evaluating and developing programs that will improve the health of the people of Wisconsin. The data are also widely used for estimating population characteristics and changes.

Each county is a primary registration district for vital events for the rural areas, villages and towns. The Register of Deeds office is, according to the Statutes, the place for filing records from these areas. In addition, cities, as defined by Wisconsin Statutes, serve as primary registration districts whose local health officer acts as the local registrar.

Legal responsibility for preparation and filing birth records is that of the attending physician. Because nearly all births occur in hospitals, most of the information obtained on the birth certificate is recorded by hospital personnel.

The Funeral Director has legal responsibility for obtaining information on death and fetal death certificates and for filing the records with the local registrar. He obtains the medical information, including the cause of death from the physician in attendance, coroner or medical examiner.

The Section of Vital Records maintains a permanent depository for original records of birth, death, marriage and transcripts of divorce. The statistics in this volume include vital records for the year 1976 that were filed in the Section of Vital Records before March 31, 1977. In addition to vital events occurring in Wisconsin, the Section files transcripts of birth certificates for children born outside of Wisconsin to a mother who is a resident of the state. Death certificates for persons who are residents but die outside of the boundaries of Wisconsin are also included.

Wisconsin is one of the first states to institute the use of computerized mortality coding procedures to determine the underlying cause of death. It is anticipated that mortality statistics will be more accurate and consistent as a result of this change. In addition, the computerized system permits extensive cross tabulation by both underlying cause and specific associated causes.

Under the general supervision of Raymond D. Nashold, Director of the Bureau of Health Statistics and Diann Giovannini, Assistant Director, with editorial consultation by Henry Krebs, Research Analyst, data processing and analysis were coordinated by Frederick Krantz, Research Analyst. Data preparation and tabulations were made by Margaret K. Schmale, Research Assistant.



Table 3

## WISCONSIN POPULATION CHARACTERISTICS BY COUNTY - JULY 1, 1976 ESTIMATE

P. 1 of 2 pages

County	Male	Female	Total	Age			
				0-19	20-34	35-64	65+
State Total.....	2,266,900	2,341,500	4,609,000	1,663,250	1,046,450	1,391,650	507,050
Adams.....	5,850	5,550	11,400	3,750	2,250	3,550	1,850
Ashland.....	8,000	8,600	16,600	6,300	3,200	4,850	2,250
Barron.....	18,650	18,150	36,800	13,000	6,750	12,100	4,950
Bayfield.....	6,500	6,200	12,700	4,200	2,500	3,950	2,050
Brown.....	90,050	83,250	173,300	68,950	41,300	48,200	14,850
Buffalo.....	7,250	7,050	14,300	5,100	2,600	4,700	1,900
Burnett.....	5,400	6,200	11,600	3,250	1,950	4,350	2,050
Calumet.....	14,900	13,700	28,600	11,350	6,850	7,950	2,450
Chippewa.....	24,250	24,850	49,100	18,950	10,750	13,950	5,450
Clark.....	16,850	15,250	32,100	12,000	6,150	9,250	4,700
Columbia.....	20,450	21,950	42,400	16,000	8,200	12,350	5,850
Crawford.....	8,650	7,650	16,300	6,050	3,150	4,700	2,400
Dane.....	146,250	160,650	306,900	104,150	95,400	82,550	24,800
Dodge.....	34,550	38,450	73,000	22,950	17,100	23,650	9,300
Door.....	11,600	11,100	22,700	7,500	4,400	7,100	3,700
Douglas.....	21,150	23,850	45,000	15,250	10,150	14,550	5,050
Dunn.....	15,450	16,850	32,300	13,200	8,000	7,950	3,150
Eau Claire.....	37,050	37,350	74,400	27,450	17,700	20,800	8,450
Florence.....	1,950	1,750	3,700	1,350	700	1,100	550
Fond du Lac.....	43,250	44,450	87,700	33,850	19,250	24,850	9,750
Forest.....	4,050	4,050	8,100	2,900	1,550	2,600	1,050
Grant.....	24,100	26,300	50,400	20,600	12,450	12,350	5,000
Green.....	14,050	15,150	29,200	11,000	5,650	8,500	4,050
Green Lake.....	8,350	9,050	17,400	5,750	3,150	5,600	2,900
Iowa.....	9,250	10,550	19,800	9,250	3,950	4,350	2,250
Iron.....	3,100	3,500	6,600	1,850	1,100	2,500	1,150
Jackson.....	8,150	7,950	16,100	5,700	2,950	5,250	2,200
Jefferson.....	32,150	32,450	64,600	23,850	15,350	18,050	7,350
Juneau.....	9,150	9,850	19,000	7,200	3,600	5,550	2,650
Kenosha.....	61,400	62,900	124,300	43,350	28,950	39,300	12,700
Kewaunee.....	9,150	10,650	19,800	9,200	3,900	4,400	2,300
La Crosse.....	43,750	44,050	87,800	32,400	20,900	24,550	9,950
Lafayette.....	8,450	9,750	18,200	8,450	3,650	4,000	2,100
Langlade.....	10,500	9,500	20,000	7,450	3,900	5,750	2,900
Lincoln.....	13,050	12,750	25,800	9,150	4,700	8,500	3,450
Manitowoc.....	40,900	42,000	82,900	32,050	18,200	23,450	9,200
Marathon.....	51,700	53,200	104,900	40,550	23,000	29,700	11,650
Marinette.....	19,500	19,100	38,600	13,650	7,100	12,700	5,150
Marquette.....	5,000	5,700	10,700	3,000	1,800	4,050	1,850
Menominee.....	1,300	1,400	2,700	1,600	350	600	150
Milwaukee.....	471,700	533,400	1,005,100	341,450	226,950	324,350	112,350
Monroe.....	17,250	16,750	34,000	12,050	6,150	11,250	4,550
Oconto.....	14,700	13,300	28,000	10,500	5,350	8,050	4,100
Oneida.....	14,800	14,400	29,200	10,300	5,300	9,650	3,950
Outagamie.....	65,450	60,550	126,000	50,150	30,050	35,000	10,800

Note: State estimates are shown to the nearest thousand, county estimates to the nearest hundred; therefore, the state total may not agree with the sum of the counties.

Table 3 (Cont.)

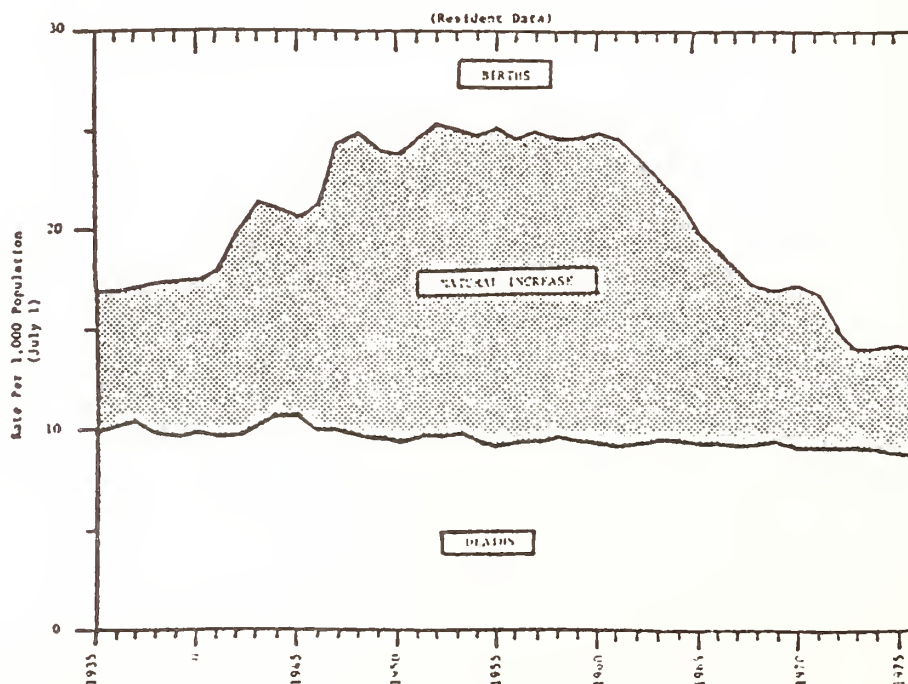
## WISCONSIN POPULATION CHARACTERISTICS BY COUNTY - JULY 1, 1976 ESTIMATE

P. 2 of 2 pages

County	Male	Female	Total	Age			
				0-19	20-34	35-64	65+
Ozaukee.....	34,600	30,800	65,400	24,350	14,650	21,650	4,750
Pepin.....	3,800	3,800	7,600	2,700	1,400	2,500	1,000
Pierce.....	14,200	15,500	29,700	12,100	7,350	7,300	2,950
Polk.....	15,450	15,050	30,500	10,800	5,550	10,100	4,050
Portage.....	25,250	27,550	52,800	21,600	13,050	12,950	5,200
Price.....	8,200	7,900	16,000	5,250	3,050	5,050	2,650
Racine.....	86,800	88,900	175,700	61,300	40,900	55,550	17,950
Richland.....	8,100	8,700	16,800	6,350	3,250	4,850	2,350
Rock.....	66,450	68,050	134,500	46,950	31,250	42,550	13,750
Rusk.....	8,200	7,300	15,500	5,800	3,000	4,450	2,250
St. Croix.....	19,550	20,050	39,600	15,300	3,650	11,200	4,450
Sauk.....	19,550	21,050	40,600	15,350	7,800	11,850	5,600
Sawyer.....	5,950	5,350	11,300	4,050	1,900	3,600	1,750
Shawano.....	17,950	17,450	35,400	12,500	6,450	11,700	4,750
Sheboygan.....	47,400	52,700	100,100	31,450	23,400	32,450	12,800
Taylor.....	9,250	9,350	18,600	6,650	3,450	5,950	2,550
Trempealeau.....	12,400	12,000	24,400	8,650	4,450	8,050	3,250
Vernon.....	12,750	12,050	24,800	8,200	4,800	7,750	4,050
Vilas.....	7,300	6,600	13,900	4,950	2,400	4,400	2,150
Walworth.....	32,950	33,150	66,100	24,450	15,700	18,500	7,450
Washburn.....	6,900	6,200	13,100	4,700	2,200	4,150	2,050
Washington.....	39,900	36,900	76,800	30,550	18,300	21,350	6,600
Waukesha.....	137,550	122,450	260,000	96,800	58,150	85,950	19,100
Waupaca.....	19,650	21,450	41,100	13,500	7,400	13,350	6,850
Waushara.....	8,000	8,800	16,800	5,500	3,050	5,450	2,800
Winnebago.....	65,750	66,350	132,100	48,750	31,400	36,950	15,000
Wood.....	34,050	35,050	69,100	26,700	15,150	19,550	7,700

Figure 5

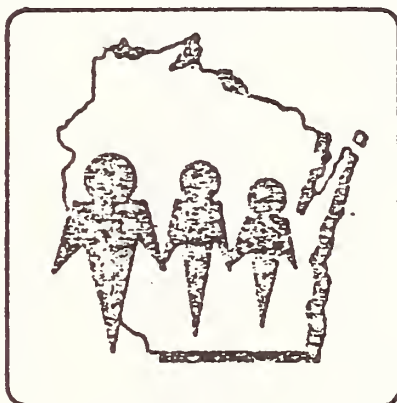
BIRTH AND DEATH RATES, WISCONSIN, 1935-1976



EXCERPTS ONLY

# OFFICIAL POPULATION ESTIMATES FOR 1979

FINAL ESTIMATES FOR ALL WISCONSIN TOWNS,  
INCORPORATED VILLAGES AND CITIES AS OF JANUARY 1, 1979



PUBLISHED ANNUALLY ON OCTOBER 10th BY  
DEPARTMENT OF ADMINISTRATION  
DEMOGRAPHIC SERVICES CENTER

GENERAL EXECUTIVE FACILITY II  
MADISON, WISCONSIN 53702  
PHONE (608) 266-1927

	4/1/70 CENSUS	1/1/79 ESTIMATE	4/70-1/79 DIFF	%DIFF
1 ADAMS	9234.	12221.	2987.	32.35
2 ASHLAND	16743.	16031.	-712.	-4.25
3 BARRON	33955.	37395.	3440.	10.13
4 BAYFIELD	11683.	13103.	1420.	12.15
5 BROWN	158244.	176217.	17973.	11.36
6 BUFFALO	13743.	14703.	960.	6.99
7 BURNETT	9276.	11456.	2180.	23.50
8 CALUMET	27604.	30629.	3025.	10.96
9 CHIPPEWA	47717.	50992.	3275.	6.86
10 CLARK	30361.	32163.	1802.	5.94
11 COLUMBIA	40150.	42504.	2354.	5.86
12 CRAWFORD	15252.	15539.	287.	1.88
13 DANE	290272.	323499.	33227.	11.45
14 DODGE	69004.	74257.	5253.	7.61
15 DOOR	20106.	24567.	4461.	22.19
16 DOUGLAS	44657.	44061.	-596.	-1.33
17 DUNN	28991.	31316.	2325.	8.02
18 EAU CLAIRE	67219.	75648.	8429.	12.54
19 FLORENCE	3298.	3869.	571.	17.31
20 FOND DU LAC	84567.	88985.	4418.	5.22
21 FOREST	7691.	8713.	1022.	13.29
22 GRANT	48398.	51699.	3301.	6.82
23 GREEN	26714.	29186.	2472.	9.25
24 GREEN LAKE	16878.	17701.	823.	4.88
25 IOWA	19306.	19880.	574.	2.97
26 IRON	6533.	6565.	32.	0.49
27 JACKSON	15325.	16083.	758.	4.95
28 JEFFERSON	60060.	64291.	4231.	7.04
29 JUNEAU	18455.	19384.	929.	5.03
30 KENOSHA	117917.	126638.	8721.	7.40
31 KEWAUNEE	18961.	19704.	743.	3.92
32 LA CROSSE	80468.	91347.	10879.	13.52
33 LAFAYETTE	17456.	18320.	864.	4.95
34 LANGLADE	19220.	19797.	577.	3.00
35 LINCOLN	23499.	26031.	2532.	10.77
36 MANITOWOC	82294.	83951.	1657.	2.01



	4/1/70 CENSUS	1/1/79 ESTIMATE	4/70-1/79 DIFF	%DIFF
37 MARATHON	97457.	111487.	14030.	14.40
38 MARINETTE	35810.	38392.	2582.	7.21
39 MARQUETTE	8865.	10334.	1469.	16.57
40 MENOMINEE	2607.	3140.	533.	20.44
41 MILWAUKEE	1054249.	953127.	-101122.	-9.59
42 MONROE	31610.	34350.	2740.	8.67
43 OCONTO	25553.	28873.	3320.	12.99
44 ONEIDA	24427.	30379.	5952.	24.37
45 OUTAGAMIE	119398.	132016.	12618.	10.57
46 OZAUKEE	54461.	70833.	16372.	30.06
47 PEPIN	7319.	7621.	302.	4.13
48 PIERCE	26652.	29881.	3229.	12.12
49 POLK	26666.	30997.	4331.	16.24
50 PORTAGE	47541.	56587.	9046.	19.03
51 PRICE	14520.	15326.	806.	5.55
52 RACINE	170838.	179502.	8664.	5.07
53 RICHLAND	17079.	16877.	-202.	-1.18
54 ROCK	131970.	139771.	7801.	5.91
55 RUSK	14238.	15047.	809.	5.68
56 ST. CROIX	34354.	43091.	8737.	25.43
57 SAUK	39057.	41743.	2686.	6.88
58 SAWYER	9670.	11421.	1751.	18.11
59 SHAWANO	32650.	35374.	2724.	8.34
60 SHEBOYGAN	96660.	100912.	4252.	4.40
61 TAYLOR	16958.	19152.	2194.	12.94
62 TREMPLEAU	23344.	25591.	2247.	9.63
63 VERNON	24557.	25233.	676.	2.75
64 VILAS	10958.	15504.	4546.	41.49
65 WALWORTH	63444.	69870.	6426.	10.13
66 WASHBURN	10601.	12660.	2059.	19.42
67 WASHINGTON	63839.	86163.	22324.	34.97
68 WAUKESHA	231335.	293779.	62444.	26.99
69 WAUPACA	37780.	41969.	4189.	11.09
70 WAUSHARA	14795.	17009.	2214.	14.96
71 WINNEBAGO	129946.	133770.	3824.	2.94
72 WOOD	65362.	72052.	6690.	10.24
** STATE	4417821.	4688278.	270457.	6.12



	4/1/70 CENSUS	1/1/79 ESTIMATE	4/70-1/79 DIFF	%DIFF
7 BURNETT (CONT)				
7191. V WEBSTER	502.	580.	78.	15.54
7 BURNETT	9276.	11456.	2180.	23.50
8 CALUMET				
8002. T BRILLION	1324.	1227.	-97.	-7.33
8004. T BROTHERTOWN	1420.	1407.	-13.	-0.92
8006. T CHARLESTOWN	1079.	1036.	-43.	-3.99
8008. T CHILTON	1116.	1180.	64.	5.73
8010. T HARRISON	3260.	3520.	260.	7.98
8012. T NEW HOLSTEIN	1513.	1604.	91.	6.01
8014. T RANTOUL	1243.	1188.	-55.	-4.42
8016. T STOCKBRIDGE	1285.	1234.	-51.	-3.97
8018. T WOODVILLE	1207.	1198.	-9.	-0.75
8136. V HILBERT	896.	1075.	179.	19.98
8179. V SHERWOOD	350.	395.	45.	12.86
8181. V STOCKBRIDGE	582.	600.	18.	3.09
8201. C APPLETON *	3401.	5512.	2111.	62.07
8206. C BRILLION	2588.	2752.	164.	6.34
8211. C CHILTON	3030.	2929.	-101.	-3.33
8241. C KIEL *	298.	416.	118.	39.60
8261. C NEW HOLSTEIN	3012.	3356.	344.	11.42
8 CALUMET	27604.	30629.	3025.	10.96
9 CHIPPEWA				
9002. T ANSON	1446.	1567.	121.	8.37
9004. T ARTHUR	774.	766.	-8.	-1.03
9006. T AUBURN	408.	498.	90.	22.06
9008. T BIRCH CREEK	365.	405.	40.	10.96
9010. T BLOOMER	800.	894.	94.	11.75
9012. T CLEVELAND	607.	678.	71.	11.70
9014. T COLBURN	678.	718.	40.	5.90
9016. T COOKS VALLEY	610.	665.	55.	9.02
9018. T DELMAR	1079.	1112.	33.	3.06
9020. T EAGLE POINT	2224.	2630.	406.	18.26
9022. T EDSON	1082.	984.	-98.	-9.06
9024. T ESTELLA	484.	444.	-40.	-8.26
9026. T GOETZ	613.	641.	28.	4.57
9028. T FALLIE	3568.	4062.	494.	13.85
9032. T HOWARD	643.	635.	-8.	-1.24
9034. T LAFAYETTE	4189.	3900.	-289.	-6.90
9035. T LAKE HOLCOMBE	648.	708.	60.	9.26
9036. T RUBY	469.	413.	-56.	-11.94
9038. T SAMPSON	724.	872.	148.	20.44
9040. T SIGEL	654.	747.	93.	14.22
9042. T TILDEN	963.	1118.	155.	16.10
9044. T WHEATON	1782.	2206.	424.	23.79
9046. T WOODMOHR	872.	996.	124.	14.22
9106. V BOYD	574.	622.	48.	8.36
9111. V CADOTT	977.	1242.	265.	27.12

	4/1/70 CENSUS	1/1/79 ESTIMATE	4/70-1/79 DIFF	%DIFF
9 CHIPPEWA (CONT)				
9161. V NEW AUBURN #	368.	400.	32.	8.70
9206. C BLUMER	3143.	3371.	223.	7.25
9211. C CHIPPEWA FALLS	12351.	12658.	307.	2.49
9213. C CORNELL	1616.	1535.	-81.	-5.01
9221. C EAU CLAIRE #	957.	1501.	544.	56.84
9281. C STANLEY	2049.	2004.	-45.	-2.20
9 CHIPPEWA	47717.	50992.	3275.	6.86
10 CLARK				
10002. T BEAVER	718.	769.	51.	7.10
10004. T BUTLER	83.	88.	5.	6.02
10006. T COLBY	812.	853.	41.	5.05
10008. T CEWHURST	99.	134.	35.	35.35
10010. T EATON	572.	611.	39.	6.82
10012. T FOSTER	51.	93.	42.	82.35
10014. T FREMONT	905.	939.	34.	3.76
10016. T GRANT	736.	799.	63.	8.56
10018. T GREEN GROVE	663.	672.	9.	1.36
10020. T HENDRY	526.	610.	84.	15.97
10022. T HENNETT	170.	295.	125.	73.53
10024. T HIXON	791.	729.	-62.	-7.84
10026. T HOARD	919.	820.	-99.	-10.77
10028. T LEVIS	337.	364.	27.	8.01
10030. T LONGWOOD	728.	696.	-32.	-4.40
10032. T LOYAL	819.	810.	-9.	-1.10
10034. T LYNN	555.	597.	42.	7.57
10036. T MAYVILLE	957.	962.	5.	0.52
10038. T MEAD	237.	216.	-21.	-8.86
10040. T MENTOR	584.	577.	-7.	-1.20
10042. T PINE VALLEY	923.	1067.	144.	15.60
10044. T RESEBURG	742.	696.	-46.	-6.20
10046. T SEIF	162.	198.	36.	22.22
10048. T SHERMAN	674.	651.	-23.	-3.41
10050. T SHERWOOD	199.	175.	-24.	-12.06
10052. T THORP	873.	842.	-31.	-3.55
10054. T UNITY	796.	833.	37.	4.65
10056. T WARNER	607.	592.	-15.	-2.47
10058. T WASHBURN	325.	299.	-26.	-8.00
10060. T WESTON	602.	683.	81.	13.46
10062. T WITHEE	801.	829.	28.	3.50
10064. T WORDEN	595.	567.	-28.	-4.71
10066. T YORK	847.	891.	34.	4.01
10111. V CURTISS	135.	138.	3.	2.22
10116. V DORCHESTER	491.	598.	107.	21.79
10131. V GRANTON	288.	347.	59.	20.49
10186. V UNITY #	154.	222.	68.	44.16
10191. V WITHEE	480.	491.	11.	2.29
10201. C ABBOTSFORD #	1108.	1439.	331.	29.87
10211. C COLBY #	885.	1031.	146.	16.50

REVISED MODEL 2  
DEPARTMENT OF ADMINISTRATION  
POPULATION PROJECTIONS

Exhibit B-3:  
POPULATION PROJECTIONS  
60 years and older

WISCONSIN COUNTRIES 1980 PERCENT OF 1980 TOTAL POPULATION 60 AND OVER 1985 PERCENT OF 1985 TOTAL POPULATION 60 AND OVER

COUNTIES	1980 POPULATION 60 AND OVER	1980 TOTAL POP. 60 AND OVER	1985 POPULATION 60 AND OVER	1985 TOTAL POP. 60 AND OVER	PERCENT OF 1985 TOTAL POPULATION 60 AND OVER
ADAMS	3246	25.8	3814	26.1	14590
ASHLAND	3857	24.9	3819	25.8	14830
BARRON	8236	21.2	8838	21.2	41610
BAYFIELD	3063	24.3	3196	24.4	13100
BROWN	23095	12.6	25136	12.7	197760
BUFFALO	3135	21.6	3273	21.9	14960
BURNETT	3315	27.0	3790	27.3	13880
CALUMET	3085	12.3	4166	12.2	34140
CHIPPEWA	8926	17.8	9662	18.6	52610
CLARK	7254	23.1	7747	24.1	32190
COLUMBIA	8484	19.2	8941	19.2	46610
CRAWFORD	3460	22.0	3652	22.9	15470
DANE	36099	11.3	38622	11.6	331520
DODGE	13386	17.9	14408	18.4	79170
DOOR	5529	22.6	6138	22.9	26790
DOUGLAS	3124	18.6	8045	18.6	43240
DURN	5246	16.8	5400	16.8	32680
EAU CLAIRE	11373	16.1	12963	16.9	76920
FLORENCE	928	24.5	1021	25.1	4670
FOND DU LAC	15162	16.6	16131	16.9	95530
FOREST	1361	21.5	1920	21.7	7140
GRANT	8958	17.0	9618	17.5	55020
GREEN	5440	17.7	5872	17.8	33100
GREEN LAKE	4163	23.5	4294	23.6	13200
IOWA	3374	17.3	3507	17.6	19920
IRON	1370	28.6	1876	29.0	6480
JACKSON	3463	21.4	3555	21.4	16600
JEFFERSON	11187	16.1	11773	15.7	74890
JUREAU	4049	20.2	4095	19.7	20610
KENOSHA	19902	14.6	22309	15.2	146850
KELAUNEE	3550	17.5	3698	17.6	20980

\*\*\*\*\*  
 \* REVISED MODEL 2 \*  
 \* DEPARTMENT OF ADMINISTRATION \*  
 \* POPULATION PROJECTIONS \*  
 \*\*\*\*\*

WISCONSIN COUNTIES	1980 POPULATION 60 AND OVER	PERCENT OF TOTAL POP. 60 AND OVER	1980 TOTAL POPULATION	1985 POPULATION 60 AND OVER	PERCENT OF TOTAL POP. 60 AND OVER	1985 TOTAL POPULATION
LA CROSSE	14862	17.4	85540	15833	18.0	88160
LAFAYETTE	3216	17.3	18550	3445	17.9	19280
LANGLADE	4435	23.2	19090	4654	24.4	19060
LINCOLN	5561	20.4	27210	5992	20.5	29180
MANITOWOC	15156	18.0	84150	15914	18.6	85550
MARATHON	16837	15.1	111300	18506	15.6	119000
MARINETTE	9193	24.1	38100	9777	24.9	39240
MARQUETTE	2893	27.4	10580	3152	27.4	11510
MEMPHIS	368	12.9	2850	422	14.2	2980
MILWAUKEE	166063	16.4	1010470	166350	16.8	991580
MONROE	6763	19.7	34310	7504	20.9	35530
MONTGOMERY	6209	20.2	29700	6550	20.5	32000
ONEIDA	6972	21.6	31960	6053	22.2	36290
OUTAGAMIE	17774	13.7	129710	19540	14.3	136320
OZAUCHEE	8720	11.1	78210	10833	11.5	94190
PEPIN	1689	22.8	7410	1707	22.9	7460
PIERCE	4530	14.1	32200	4740	13.5	35190
POLK	7029	21.3	32950	7691	21.1	36460
PORTAGE	7495	12.9	57900	7975	12.6	63530
PRICE	3779	24.3	15560	3933	24.5	16030
RACINE	25545	13.8	185170	27730	14.2	194700
RICHLAND	3542	22.2	15930	3627	23.4	15470
ROCK	20015	13.8	144720	21018	13.8	152570
RUSK	3493	23.5	14840	3750	24.7	15160
ST CROIX	5793	13.4	43340	6511	13.3	48910
SAUK	8442	20.3	41530	8961	20.9	42990
SAVYER	3167	25.4	12460	3440	24.7	13950
SHAWANO	7982	22.4	35610	8575	23.1	37140
SHEBOYGAN	18474	18.0	102910	19147	17.9	106800
TAYLOR	3600	19.1	18580	3957	19.8	20000
TREMPEALEAU	5519	22.5	24570	5819	23.1	25180
VERNON	5685	22.3	25460	5958	22.8	26080
VILAS	4059	27.9	14560	4718	28.7	16450
WALWORTH	11874	16.0	74190	12692	15.9	79920



REVISI MODEL 2  
 DEPARTMENT OF ADMINISTRATION  
 POPULATION PROJECTIONS

WISCONSIN COUNTIES	1980 PERCENT OF 1980 TOTAL		1985 PERCENT OF 1985 TOTAL	
	POPULATION 60 AND OVER	TOTAL POP. AND OVER	POPULATION 60 AND OVER	TOTAL POP. AND OVER
WASHBURN	3250	25.7	3674	26.8
WASHINGTON	10522	11.3	12614	11.2
WAUKESHA	30696	10.3	37360	11.0
WAUPACA	10255	24.1	10895	24.2
WAUSHARA	4142	24.2	4377	23.9
WINNEBAGO	22491	15.4	21001	15.6
WOOD	11802	16.9	13151	18.1
	771961	16.1	822877	16.4
	771961	16.1	822877	16.4
				5032640



Date \_\_\_\_\_

WISCONSIN COORDINATION STUDY  
HUMAN SERVICE AGENCY DATA FORM

Agency Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Telephone: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

Eligible Clients: \_\_\_\_\_

Number of Clients Currently Served: \_\_\_\_\_ mo./yr.

1. Does your agency provide transportation to clients and/or staff in any of the following ways?

Operate Agency  
Vehicles . . . . . \_\_\_\_\_  
Purchase Transportation  
Services . . . . . \_\_\_\_\_  
Use Volunteers or Staff  
who drive own cars . . . . . \_\_\_\_\_  
Reimburse clients; staff  
for transportation expenses . \_\_\_\_\_

2. Which of the following would best describe your organization?  
Is it:

Private, for profit . . . \_\_\_\_\_  
Private, non-profit . . . \_\_\_\_\_  
Public (State/local) . . . . . \_\_\_\_\_  
Other (Specify) . . . . . \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. Which of the following services does your agency/organization provide? (Read Responses)

Educational .....	_____
transportation .....	_____
head start .....	_____
day care (child).....	_____
welfare/food stamps ...	_____
counseling .....	_____
nutritional .....	_____
recreational/social ...	_____
religious .....	_____
medical/dental .....	_____
employment .....	_____
residential care .....	_____
rehabilitation .....	_____
Other (Specify) .....	_____

\_\_\_\_\_  
\_\_\_\_\_

I. OPERATE AGENCY VEHICLES

1. How many one way passenger trips were provided from Jan. - Aug, 1979? \_\_\_\_\_

2. How many of your agency's trips are provided to each of the following groups? (Give % estimate)

Young Children (under 12)	_____
Adolescents (12-21)	_____
Elderly (60+)	_____
Mentally Impaired	_____
Non-Ambulatory Handicapped	_____
Ambulatory Handicapped	_____

3. How many of your clients currently being served:

Ability to Use  
Public Transit  
IMP. DIF. NO.

must use a wheelchair	_____	_____	_____
need personal assistance	_____	_____	_____
use a mechanical aid (other than a wheelchair, i.e., cane or orthopedic devise	_____	_____	_____
do not need mechanical aid or personal assistance, but still have trouble getting around	_____	_____	_____
have no trouble getting around	_____	_____	_____

4. For what kinds of trips do you provide this transportation?

Employment	_____
Shopping	_____
Field Trips	_____
All Trip Purposes	_____
To social service facilities and agencies	_____
To health care facilities and agencies	_____
To training, education facilities	_____
Organized recreation	_____
Other (Specify)	_____
	_____
	_____
	_____

5. What were your agency's Outlays and Expenditures from January - August 1979?

a. OPERATING EXPENSES	DOLLAR COSTS
A. Labor - drivers, dispatchers (should include fringe benefits, if any)	_____
B. Maintenance/Repairs (Parts and labor)	_____
C. Fuel, Oil	_____
D. Vehicle Leasing Expenses	_____
E. Insurance	_____
b. Operating Expenses Subtotal	_____

.. ADMINISTRATIVE EXPENSES

A. Labor (Include fringe benefits)*	_____
B. Total Office Expenses (i.e., space rental, tele- phone, office equipment, advertising)	_____
Administrative Expenses Subtotal	_____
TOTAL EXPENSES	_____

\* if not known, can be calculated by estimating the average no. of hours per month devoted to administration of transportation, multiplying this by the monthly salary of the employee, and then multiplying this by the average fringe benefit rate for the agency.

6. Please list the major sources of funds for your agency's transportation services, and the annual amount contributed by each during the current fiscal year. (Please also indicate whether or not this contribution is on-going, or a one-time event.)

Source	Amt. of Funds \$XX,XXX	On-going Funds or One-time

7. Does your agency charge fares or contributions for its transportation services?

\_\_\_\_\_ Yes      \_\_\_\_\_ No

8. What is the fare per trip? \_\_\_\_\_

9. What is the suggested contribution? \_\_\_\_\_

10. How much revenue did your agency receive from January to August, 1979?

Source	Amount of Funds
fares, contributions	



11. How many vehicle miles did your vehicles run from January - August, 1979?

\_\_\_\_\_

12. Please list the cities and towns that are served by your agency/ organization. \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

13. Are there any restrictions on the provision of transportation under programs administered or operated by your agency?

Yes \_\_\_\_\_  
- No \_\_\_\_\_

(IF YES), what are the restrictions? (CHECK ALL THAT APPLY)

only clients of programs served by this	
agency.....	_____
age (Specify) .....	_____
health or disability (Specify) ..	_____
geographical boundaries .....	_____
income .....	_____
other (Specify).....	_____

\_\_\_\_\_

14. (IF RESTRICTIONS REQUIRED UNDER LAW OR REGULATION, PLEASE SPECIFY.)

\_\_\_\_\_ State \_\_\_\_\_ Federal

Act or Regulation \_\_\_\_\_  
\_\_\_\_\_

15. Are you able to serve all of your clients' requests for transportation service?

\_\_\_\_\_ Yes \_\_\_\_\_ No

16. IF NO, why? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

17. What type of insurance does your agency require for its transportation program?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

18. Do the transportation services that you provide with your own vehicles operate along fixed routes at regular times?

\_\_\_\_\_ Yes \_\_\_\_\_ No

IF YES; Please describe. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

IF NO; Since your vehicles do not operate on fixed routes and schedules, how do your clients request service?  
\_\_\_\_\_  
\_\_\_\_\_

19. Are advance reservations required for your transportation services?

\_\_\_\_\_ Yes \_\_\_\_\_ No

IF YES; How far in advance? \_\_\_\_\_ hours (days)

20. Are there particular facilities that are regular destinations of your agency's transportation service?

\_\_\_\_\_ Yes \_\_\_\_\_ No

IF YES; Could you list those facilities for me, their location and the services they provide?

---

---

---

21. How many drivers does your agency currently have that are:

Full-time \_\_\_\_\_ Total Paid Weekly Hours \_\_\_\_\_

Part-time \_\_\_\_\_ Total Paid Weekly Hours \_\_\_\_\_

Paid \_\_\_\_\_ Volunteer \_\_\_\_\_

Union \_\_\_\_\_ Non-Union \_\_\_\_\_

Trained

First Aid \_\_\_\_\_ Cardio-Pulmonary  
Resuscitation \_\_\_\_\_

Sensitivity \_\_\_\_\_ School Bus \_\_\_\_\_

22. Do you currently transport the clients of any other agency or organization?

\_\_\_\_\_ Yes \_\_\_\_\_ No

23. IF YES; which agencies and organizations?

Agency/Organization	Contract	No of Trips from Jan to Aug, 1979	Cost from Jan to August, 1979

24. Are your transportation services coordinated in any way with the transportation services of other agencies and organizations? (e.g., integrated scheduling or dispatching, vehicle sharing, centralized purchasing of service, centralized maintenance, centralized billing)

\_\_\_\_\_ Yes \_\_\_\_\_ No

25. IF YES, please describe \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Agencies Involved \_\_\_\_\_  
\_\_\_\_\_

26. During what hours of each day are your vehicles currently being used:

No. and Type of Vehicles*	Days of the Week							Total Hours per week
	Sun	Mon	Tues	Wed	Thur	Fri	Sat	

CONTINUE ON BACK OF THIS SHEET IF NECESSARY.

\* Sedan; Station Wagon; Van = 8 - 14 passengers; Small Bus = 15 - 24 passengers; Large Bus = 25+ passengers.

27. Is the above schedule the same every week?

\_\_\_\_\_ Yes \_\_\_\_\_ No

28, I HAVE A CHART TO COMPLETE ON THE VEHICLES THAT YOU CURRENTLY OWN OR LEASE. HERE ARE THE QUESTIONS. (LIST EACH VEHICLE SEPARATELY)

[illegible]

\* Sedan; Station Wagon; Van = 8 - 14 passengers; Small bus = 15 - 24 passengers;  
Large bus = 25+ passengers.



## II. PURCHASE TRANSPORTATION SERVICES

1. From which agencies or organizations do you purchase services?

A. \_\_\_\_\_

B. \_\_\_\_\_

C. \_\_\_\_\_

2. How many trips have you purchased from each from January to August, 1979? At what cost?

Agency/Organization	No. of Trips	Cost
A.		
B.		
C.		

3. How many of your agency's trips are provided to each of the following groups? (Give % estimate)

Young Children (under 12)	_____
Adolescents (12-21)	_____
Elderly (60+)	_____
Mentally Impaired	_____
Non-Ambulatory Handicapped	_____
Ambulatory Handicapped	_____

4. How many of your clients currently being served:

must use a wheelchair	_____
need personal assistance	_____
use a mechanical aid (other	_____
than a wheelchair, i.e., cane	
or orthopedic devise	_____
do not need mechnaical aid or	
personal assistance, but	
still have trouble getting	
around	_____
have no trouble getting around	_____

Ability to Use  
Public Transit  
IMP. DIF. NO.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

5. For what kinds of trips do you provide this transportation?

Employment \_\_\_\_\_  
Shopping \_\_\_\_\_  
Field Trips \_\_\_\_\_  
All Trip Purposes \_\_\_\_\_  
To social service facilities  
and agencies \_\_\_\_\_  
To health care facilities  
and agencies \_\_\_\_\_  
To training, education  
facilities \_\_\_\_\_  
Organized recreation \_\_\_\_\_  
Other (Specify) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. Which services do you purchase from each agency (ie. maintenance, operation of vehicles, driver services) ?

A. \_\_\_\_\_  
B. \_\_\_\_\_  
C. \_\_\_\_\_

7. Does your agency own the vehicles that your clients are transported in? (if yes, use separate page to record vehicle characteristics)

\_\_\_\_\_yes \_\_\_\_\_no

8. What were your agency's ADMINISTRATIVE costs from January - August, 1979?

A. Labor (including fringe benefits)\* \_\_\_\_\_  
B. Total Office Expenses (i.e., space rental, office equipment, advertising) \_\_\_\_\_

TOTAL EXPENSES \_\_\_\_\_

\* if not known, can be calculated by estimating the average no. of hours per month devoted to administration of transportation, multiplying this by the monthly salary of the employee, and then multiplying this by the average fringe benefit rate for the agency.

7.

[illegible]

\* Sedan; Station Wagon; Van = 0 - 14 passengers; Small bus = 15 - 24 passengers; Large bus = 25+ passengers.

9. Please list the major sources of funds for your agency's transportation services, and the annual amount contributed by each during the current fiscal year. (Please also indicate whether or not this contribution is on-going, or a one-time event.)

Source	Amt. of Funds \$XX,XXX	On-going Funds or One-time

10. Does your agency charge fares or contributions for its transportation services?

\_\_\_\_\_ Yes \_\_\_\_\_ No

11. What is the fare per trip? \_\_\_\_\_

12. What is the suggested contribution? \_\_\_\_\_

13. How much revenue did your agency receive from January to August, 1979?

Source	Amount of Funds
fares, contributions	

14. Please list the cities and towns that are served by your agency/ organization. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

15. Are there any restrictions on the provision of transportation under programs administered or operated by your agency?

Yes \_\_\_\_\_

No \_\_\_\_\_

16. (IF YES), what are the restrictions? (CHECK ALL THAT APPLY)

only clients of programs served by this agency.....

age (Specify).....

health or disability (Specify).....

geographical boundaries .....

income .....

other (Specify).....

17. (IF RESTRICTIONS REQUIRED UNDER LAW OR REGULATION, PLEASE SPECIFY.)

\_\_\_\_\_ State \_\_\_\_\_ Federal

Act or Regulation \_\_\_\_\_  
\_\_\_\_\_

18. Are you able to serve all of your clients' requests for transportation service?

\_\_\_\_\_ Yes \_\_\_\_\_ No

19. IF NO, why? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



20. What type of insurance does your agency require for its transportation program?

---

---

---

---

21. Do the transportation services that you provide with your own vehicles operate along fixed routes at regular times?

\_\_\_\_\_ Yes \_\_\_\_\_ No

IF YES; Please describe. \_\_\_\_\_

---

IF NO; Since your vehicles do not operate on fixed routes and schedules, how do your clients request service?

---

---

22. Are advance reservations required for your transportation services?

\_\_\_\_\_ Yes \_\_\_\_\_ No

IF YES; How far in advance? \_\_\_\_\_ hours (days)

23. Are there particular facilities that are regular destinations of your agency's transportation service?

\_\_\_\_\_ Yes \_\_\_\_\_ No

IF YES; Could you list those facilities for me, their location and the services they provide?

---

---

---

24. Are your transportation services coordinated in any way with the transportation services of other agencies and organizations? (e.g., integrated scheduling or dispatching, vehicle sharing, centralized purchasing of service, centralized maintenance, centralized billing)

\_\_\_\_\_ Yes \_\_\_\_\_ No

25. IF YES, please describe \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Agencies Involved \_\_\_\_\_  
 \_\_\_\_\_

26. During which hours of the day are your clients being transported?

Program	Hours of Day						
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

27. Is the above schedule the same every week? \_\_\_\_\_ yes \_\_\_\_\_ no

III. USE VOLUNTEERS \_\_\_\_\_ OR STAFF \_\_\_\_\_, DRIVING THEIR OWN CARS

1. How many one way passenger trips were provided from Jan. - Aug, 1979? \_\_\_\_\_

2. How many of your agency's trips are provided to each of the following groups? (Give % estimate)

Young Children (under 12)	_____
Adolescents (12-21)	_____
Elderly (60+)	_____
Mentally Impaired	_____
Non-Ambulatory Handicapped	_____
Ambulatory Handicapped	_____

3. How many of your clients currently being served:

must use a wheelchair	_____
need personal assistance	_____
use a mechanical aid (other	_____
than a wheelchair, i.e., cane	_____
or orthopedic devise	_____
do not need mechnaical aid or	_____
personal assistance, but	_____
still have trouble getting	_____
around	_____
have no trouble getting around	_____

Ability to Use  
Public Transit  
IMP. DIF. NO.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

4. For what kinds of trips do you provide this transportation?

Employment	_____
Shopping	_____
Field Trips	_____
All Trip Purposes	_____
To social service facilities	_____
and agencies	_____
To health care facilities	_____
and agencies	_____
To training, education	_____
facilities	_____
Organized recreation	_____
Other (Specify)	_____
_____	_____
_____	_____
_____	_____

5. Does your agency reimburse volunteers \_\_\_\_/staff \_\_\_\_ who use their own vehicles to transport your clients?

Yes (please specify) \_\_\_\_volunteers  
\_\_\_\_staff

No . . . . . \_\_\_\_

6. How much did your agency spend from January-August, 1979 for this reimbursement?  
\_\_\_\_\_

7. Is reimbursement based on:

Mileage at \_\_\_\_per mile  
Flat rate of \_\_\_\_per trip  
Flat rate of \_\_\_\_per month

8. Vehicle miles reimbursed from January-August, 1979 \_\_\_\_\_

9. What were your agency's ADMINISTRATIVE costs from January - August, 1979?

A. Labor (including fringe benefits)\* \_\_\_\_\_

B. Total Office Expenses (i.e., space rental, office equipment, advertising) \_\_\_\_\_

TOTAL EXPENSES \_\_\_\_\_

\* if not known, can be calculated by estimating the average no. of hours per month devoted to administration of transportation, multiplying this by the monthly salary of the employee, and then multiplying this by the average fringe benefit rate for the agency.

10. Please list the major sources of funds for your agency's transportation services, and the annual amount contributed by each during the current fiscal year. (Please also indicate whether or not this contribution is on-going, or a one-time event.)

Source	Amt. of Funds \$XX,XXX	On-going Funds or One-time

11. Does your agency charge fares or contributions for its transportation services?

\_\_\_\_\_ Yes \_\_\_\_\_ No

12. What is the fare per trip? \_\_\_\_\_

13. What is the suggested contribution? \_\_\_\_\_

14. How much revenue did your agency receive from January to August, 1979?

Source	Amount of Funds
fares, contributions	



15. Does your agency carry insurance on these drivers/vehicles?

Yes (1) \_\_\_\_\_

No (0) \_\_\_\_\_

☐  
11

16. IF YES, is this insurance required?

Yes (1) \_\_\_\_\_

No (0) \_\_\_\_\_

☐  
13

17. IF YES, by whom?

\_\_\_\_\_ ☐ ☐  
15 16

18. Please list the cities and towns that are served by your agency/organization. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

19. Are there any restrictions on the provision of transportation under programs administered or operated by your agency?

Yes \_\_\_\_\_

No \_\_\_\_\_

20. (IF YES), what are the restrictions? (CHECK ALL THAT APPLY)

only clients of programs served by this  
agency.....  
age (Specify) .....  
health or disability (Specify) .....  
geographical boundaries .....  
income .....  
other (Specify).....  
\_\_\_\_\_

21. (IF RESTRICTIONS REQUIRED UNDER LAW OR REGULATION, PLEASE SPECIFY.)

\_\_\_\_\_ State \_\_\_\_\_ Federal

Act or Regulation \_\_\_\_\_  
\_\_\_\_\_

22. Are you able to serve all of your clients' requests for transportation service?

\_\_\_\_\_ Yes

\_\_\_\_\_ No

23. IF NO, why? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

24. Do the transportation services that you provide operate along fixed routes at regular times?

\_\_\_\_\_yes \_\_\_\_\_no

IF YES, Please describe. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

IF NO, how do your clients request the service? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

25. Are advance reservations required for your transportation services?

\_\_\_\_\_Yes \_\_\_\_\_No

IF YES; How far in advance? \_\_\_\_\_hours (days

26. Are there particular facilities that are regular destinations of your agency's transportation service?

\_\_\_\_\_Yes \_\_\_\_\_No

IF YES; Could you list those facilities for me, their location and the services they provide?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

27. How many volunteer drivers do you currently have? \_\_\_\_\_

28. How many of these are active (i.e. transport someone once per month?)  
\_\_\_\_\_

29. Are your transportation services coordinated in any way with the transportation services of other agencies and organizations? (e.g., integrated scheduling or dispatching, vehicle sharing, centralized purchasing of service, centralized maintenance, centralized billing)

\_\_\_\_\_ Yes \_\_\_\_\_ No

30. IF YES, please describe \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Agencies Involved \_\_\_\_\_  
\_\_\_\_\_

31. During which hours of the day are your clients being transported?

Program	Hours of Day						
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

32. Is the above schedule the same every week? \_\_\_\_\_ yes \_\_\_\_\_ no

IV. REIMBURSE \_\_\_\_\_ OR SUBSIDIZE \_\_\_\_\_ CLIENTS FOR TRANSPORTATION

1. How many one way passenger trips were provided from Jan. - Aug, 1979? \_\_\_\_\_
2. How many of your agency's trips are provided to each of the following groups? (Give % estimate)

Young Children (under 12)	_____
Adolescents (12-21)	_____
Elderly (60+)	_____
Mentally Impaired	_____
Non-Ambulatory Handicapped	_____
Ambulatory Handicapped	_____

3. How many of your clients currently being served:

must use a wheelchair	_____
need personal assistance	_____
use a mechanical aid (other	_____
than a wheelchair, i.e., cane	
or orthopedic devise	_____
do not need mechnaical aid or	_____
personal assistance, but	
still have trouble getting	_____
around	_____
have no trouble getting around	_____

Ability to Use  
Public Transit  
IMP. DIF. NO.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

4. For what kinds of trips do you provide this transportation?

Employment	_____
Shopping	_____
Field Trips	_____
All Trip Purposes	_____
To social service facilities	_____
and agencies	_____
To health care facilities	_____
and agencies	_____
To training, education	_____
facilities	_____
Organized recreation	_____
Other (Specify)	_____
_____	_____
_____	_____
_____	_____

5. How much did your agency spend from January-August, 1979 for this reimbursement? \_\_\_\_\_

6. Is reimbursement based on:

Mileage at \_\_\_\_\_ per mile  
Flat rate of \_\_\_\_\_ per trip  
Flat rate of \_\_\_\_\_ per month

7. Vehicle miles reimbursed from January-August, 1979 \_\_\_\_\_

8. What were your agency's ADMINISTRATIVE costs from January - August, 1979?

A. Labor (including fringe benefits)\* \_\_\_\_\_

B. Total Office Expenses (i.e., space rental, office equipment, advertising) \_\_\_\_\_

TOTAL EXPENSES \_\_\_\_\_

\* if not known, can be calculated by estimating the average no. of hours per month devoted to administration of transportation, multiplying this by the monthly salary of the employee, and then multiplying this by the average fringe benefit rate for the agency.

9. Do your clients choose a transportation provider themselves?  
\_\_\_\_\_ yes \_\_\_\_\_ no

10. IF YES, are there restrictions on their choice?  
\_\_\_\_\_ yes \_\_\_\_\_ no

11. IF YES, please explain. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

12. Which type of transportation do your clients generally use?

public transit \_\_\_\_\_  
E&H special public transit \_\_\_\_\_  
taxi \_\_\_\_\_  
private auto \_\_\_\_\_  
other(specify) \_\_\_\_\_  
\_\_\_\_\_



13. Please list the major sources of funds for your agency's transportation services, and the annual amount contributed by each during the current fiscal year. (Please also indicate whether or not this contribution is on-going, or a one-time event.)

Source	Amt. of Funds \$XX,XXX	On-going Funds or One-time

14. Does your agency suggest a contribution for it's transportation services?

\_\_\_\_\_ Yes \_\_\_\_\_ No

15. What is the suggested contribution? \_\_\_\_\_

16. How much revenue did your agency receive from January to August, 1979?

Source	Amount of Funds
contributions	

17. Please list the cities and towns that are served by your agency/ organization. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

18. Are there any restrictions on the provision of transportation under programs administered or operated by your agency?

Yes \_\_\_\_\_  
No \_\_\_\_\_

19. (IF YES), what are the restrictions? (CHECK ALL THAT APPLY)

only clients of programs served by this  
agency.....  
age (Specify) .....  
health or disability (Specify) .....  
geographical boundaries .....  
income .....  
other (Specify).....

20. (IF RESTRICTIONS REQUIRED UNDER LAW OR REGULATION, PLEASE SPECIFY.)

\_\_\_\_\_ State \_\_\_\_\_ Federal

Act or Regulation \_\_\_\_\_  
\_\_\_\_\_

21. Are you able to serve all of your clients' requests for transportation service?

\_\_\_\_\_ Yes \_\_\_\_\_ No

22. IF NO, why? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

23. What type of insurance does your agency require for its transportation program?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

24. Do the transportation services that you provide with your own vehicles operate along fixed routes at regular times?

\_\_\_\_\_ Yes \_\_\_\_\_ No

IF YES; Please describe. \_\_\_\_\_

IF NO; Since your vehicles do not operate on fixed routes and schedules, how do your clients request service?

25. Are advance reservations required for your transportation services?

\_\_\_\_\_ Yes \_\_\_\_\_ No

IF YES; How far in advance? \_\_\_\_\_ hours (days)

26. Are there particular facilities that are regular destinations of your agency's transportation service?

\_\_\_\_\_ Yes \_\_\_\_\_ No

IF YES; Could you list those facilities for me, their location and the services they provide?

27. Are your transportation services coordinated in any way with the transportation services of other agencies and organizations? (e.g., integrated scheduling or dispatching, vehicle sharing, centralized purchasing of service, centralized maintenance, centralized billing)

\_\_\_\_\_ Yes \_\_\_\_\_ No

28. IF YES, please describe \_\_\_\_\_

29. During which hours of the day are your clients being transported?

Program	Hours of Day						
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....

30. Is the above schedule the same every week?                 yes            no

County \_\_\_\_\_

Date \_\_\_\_\_

WISCONSIN COORDINATION STUDY  
PUBLIC TRANSIT OPERATORS

Agency Name \_\_\_\_\_

Address \_\_\_\_\_

Telephone: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title \_\_\_\_\_

1. Please list the cities and towns that are served by your organization:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. What type of transportation does your organization provide?

\_\_\_\_\_ fixed route to general public  
\_\_\_\_\_ fixed route to particular client group  
\_\_\_\_\_ demand responsive

3. Please list the major sources of funds for your agency's transportation services, and the annual amount contributed by each during the current fiscal year. (Please also indicate whether or not this contribution is on-going, or a one-time event.)

Source	Amt. of Funds \$XX,XXX	On-Going Funds or One-Time

4. How many drivers do you employ? \_\_\_\_\_ Part-Time \_\_\_\_\_ Union  
\_\_\_\_\_ Full-Time \_\_\_\_\_ Union



I. FIXED ROUTE TO GENERAL PUBLIC

1. How many one-way passenger trips did you provide from January through August of 1979? \_\_\_\_\_.

---

2. Is your fare based on:

<u>Based On</u>	<u>Fare</u>
_____ mileage	@ _____ per mile
_____ vehicle hour	@ _____ per hour
_____ zones	@ _____ per zone (attach map)
_____ flat rate	@ _____ per trip
	_____ per week
	_____ per month

---

3. How much revenue did your company receive from January through August of 1979? \_\_\_\_\_.

---

4. How many route miles do your vehicles run? \_\_\_\_\_ week/month

---

5. How many vehicle hours do your vehicles operation? \_\_\_\_\_ week/month

---

6. Description of routes/schedule (Use additional paper. Attach map/written material, if available).

---

---

---

---

---

---

---

---



## II. FIXED ROUTE TO PARTICULAR USER GROUP

1. Please give a description of the routes (and schedules) you have for particular user groups. (Use additional paper. Attach map/written material, if available).

---



---



---



---

2. What types of users are served on this route(s)?

Route	User Group	# Trips
A.		
B.		
C.		

3. How many one-way passenger trips did you provide to each user group from January through August of 1979? (Record Above).

4. What percentage of these passengers were wheelchairbound? \_\_\_\_\_ %

5. If your fare based on:

<u>Based On</u>	<u>Fare</u>
_____ mileage	@ _____ per mile
_____ vehicle hour	@ _____ per hour
_____ zones	@ _____ per zone (attach map)
_____ flat rate	@ _____ per trip
	_____ per week
	_____ per month

6. How many route miles are involved in this service? \_\_\_\_\_ week/month

II. Continued

7. How many vehicle hours are provided for this service? \_\_\_\_\_ week/month

8. How much revenue did your company receive from January through August of 1979 for this service? \_\_\_\_\_

9. What were your costs to provide all services from January through August of 1979?

Operating	\$ _____
Administrative	\$ _____
TOTAL COST	\$ _____

10. Please list the major sources of funds for your agency's transportation services, and the annual amount contributed by each during the current fiscal year or from January through August, 1979. (Please also indicate whether or not this contribution is on-going, or a one-time event.)

Source	Amt. of Funds \$XX,XXX	On-Going Funds or One-Time

11. Are there particular facilities that are regular destinations of your agency's transportation service? \_\_\_\_\_ Yes \_\_\_\_\_ No

IF YES, Could you list those facilities for me, their locations and the services they provide?

---



---



---



---



---



---





### III. DEMAND RESPONSIVE SERVICE

1. Please list the cities and towns in which this service is provided.

---

---

---

2. During which hours of the day do you provide this service?

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

3. How many one-way passenger trips did you provide from January through August of 1979? \_\_\_\_\_

4. What percentage of these passengers were wheelchairbound? \_\_\_\_\_ %

5. Is your fare based on:

<u>Based On</u>	<u>Fare</u>
_____ mileage	@ _____ per mile
_____ vehicle hour	@ _____ per hour
_____ zones	@ _____ per zone (attach map)
_____ flat rate	@ _____ per trip
	_____ per week
	_____ per month

6. How many vehicle miles are traveled for this service? \_\_\_\_\_ week/month

7. How many vehicle miles are provided for this service? \_\_\_\_\_ week/month

8. How much revenue did your company receive from January through August of 1979? \_\_\_\_\_

III. Continued

9. Are advance reservations required for your transportation services?

\_\_\_\_\_ Yes \_\_\_\_\_ No

IF YES, how far in advance? \_\_\_\_\_ hours (days)

10. (For Agency Contractors Only) List agencies, number of trips, number of vehicle miles, number of vehicle hours, and costs (from January through August, 1979):

Agency	Number of Trips	Number of Vehicle Miles	Number of Vehicle Hours	Cost

11. What were your costs to provide all services from January through August 1979?

Operation \$ \_\_\_\_\_  
Administrative \$ \_\_\_\_\_  
TOTAL COST \$ \_\_\_\_\_

12. Are there particular facilities that are regular destinations of your agency's transportation service?

\_\_\_\_\_ Yes \_\_\_\_\_ No

IF YES, Could you list those facilities for me, their locations and the services they provide?

---

---

---

---

---

County \_\_\_\_\_

Date \_\_\_\_\_

WISCONSIN COORDINATION STUDY  
PRIVATE (SPECIALIZED) OPERATOR DATA FORM  
TAXI CAB DATA FORM

Agency Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Title: \_\_\_\_\_

1. Please list the cities and towns that are served by your company: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. During which hours of the day do you transport clients?

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

3. How many one-way passenger trips did you provide from January through August of 1979? \_\_\_\_\_

4. What percentage of these passengers were wheelchairbound? \_\_\_\_\_ %

5. Is your fare based on:

<u>based on</u>	<u>fare</u>
_____ mileage	@ _____ per mile
_____ vehicle hour	@ _____ per hour
_____ zones	@ _____ per zone (attach map)
_____ flat rate	@ _____ per trip
	_____ per week
	_____ per month

6. How much revenue did your company receive from January through August of 1979? \_\_\_\_\_

7. Does your company serve agencies or individuals?

\_\_\_\_\_ agencies only

\_\_\_\_\_ agencies and individuals

\_\_\_\_\_ individuals only

8. (For Agency Contractors Only) List agencies, number of trips, number of vehicle miles, number of vehicle hours, and costs (from Jan thru Aug, 1979):

Agency	Number of Trips	Number of Vehicle Miles	Number of Vehicle Hours	Cost

9. What were your costs to provide all services from January through August of 1979?

Operating \_\_\_\_\_

Administrative \_\_\_\_\_

TOTAL COST \_\_\_\_\_

10. Please list the number and type of vehicle you own, the number of seats, whether they are lift/ramp equipped, and whether they are radio equipped:

Vehicle Type*	Number of Seats	Lift/Ramp		Radio	
		yes	no	taxi	C.B.

\*van + 8-14 passengers; small bus = 15-24 passengers

11. How many drivers do you employ? \_\_\_\_\_ part-time \_\_\_\_\_ union

\_\_\_\_\_ full-time \_\_\_\_\_ union

County: \_\_\_\_\_

Date: \_\_\_\_\_

WISCONSIN COORDINATION STUDY  
SCHOOL BUS OPERATORS

Agency Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

Contact  
Person: \_\_\_\_\_

School District \_\_\_\_\_ (Answer Questions in Group I

Private Operator \_\_\_\_\_ (Answer Questions in Group II

I SCHOOL DISTRICTS

1. Please list the cities and/or towns that are included in your school district.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Is transportation provided to pupils in each  
of these areas?

\_\_\_\_\_ yes

\_\_\_\_\_ no

3. If no, SPECIFY.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. How many client trips/week does your agency pay for and/or provide?

\_\_\_\_\_ week

\_\_\_\_\_ month



5. What percentage of these trips are provided to the following groups?

- \_\_\_\_\_ % mentally impaired  
\_\_\_\_\_ % non-ambulatory handicapped  
\_\_\_\_\_ % ambulatory handicapped  
\_\_\_\_\_ % wheelchair

6. In which of the following ways does your agency provide transportation to clients?

- \_\_\_\_\_ operate vehicles to transport clients (Answer question in Section A)  
\_\_\_\_\_ purchase transportation from other providers (Answer question in Section B)  
\_\_\_\_\_ reimburse parents to transport clients (Answer question in Section C)

SECTION A: DISTRICTS WHICH OPERATE THEIR OWN VEHICLES

7. Please complete the chart on the following page for vehicles owned by your agency.

8. How many vehicle miles do your vehicles run every month?

\_\_\_\_\_ miles

9. Are transportation services provided along a fixed route at regular times?

\_\_\_\_\_ yes \_\_\_\_\_ no

10. [IF NO], Please explain how they operate: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



11. Please describe the routes and schedules. Attach a separate sheet if necessary.

General Description	Facility	No. of Clients	Time to School	Time home from School
Example Quincy Ave/ Wisconsin St.	Moore School	8	8:30-9:30	3:30-4:30
a.				
b.				
c.				
d.				
e.				
f.				
g.				

12. Are your transportation services coordinated in any way with the transportation services of other agencies or organizations?

\_\_\_\_\_ Yes \_\_\_\_\_ No

13. [IF YES], Please explain. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

14. Please estimate the annual outlays and expenditures incurred by your agency during 1979 to operate your transportation service.

A. OPERATING

(Dollar Costs)

Labor-drivers, dispatchers (should include fringe benefits, if any) \$ \_\_\_\_\_  
 Maintenance/Repairs (Parts and Labor) \$ \_\_\_\_\_  
 Fuel, Oil \$ \_\_\_\_\_  
 Vehicle Leasing Expenses \$ \_\_\_\_\_  
 Insurance \$ \_\_\_\_\_

B. ADMINISTRATIVE

Labor (including fringe benefits) \$ \_\_\_\_\_  
 Total Office Expenses \$ \_\_\_\_\_

TOTAL \$ \_\_\_\_\_

SECTION B: DISTRICTS WHICH PURCHASE SERVICE (RECORD ANSWERS BELOW)

15. From which agencies and organizations do you purchase service?  
16. How many trips do you purchase/week or month?  
17. At what cost?

Agency	Number of Trips week or month	(\$) Cost

SECTION C: SCHOOL DISTRICTS WHICH REIMBURSE CLIENTS

18. How much did your agency spend during the last fiscal year for reimbursement of parents to transport their children to one of your specila programs?

\$ \_\_\_\_\_

19. Hom many trips were involved? \_\_\_\_\_ number

20. Is reimbursement based on:

mileage at \$ \_\_\_\_\_ per mile  
flat rate at \$ \_\_\_\_\_ per trip  
flat rate of \$ \_\_\_\_\_ per mile

II SCHOOL BUS OPERATORS

1. Please list the school districts which you provide transportation to. Which cities or towns does this involve for each?

<u>District/Address/Contact Person</u>	<u>Cities or Towns</u>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

2. Please complete the chart on the following page for vehicles owned by your agency.

3. How many vehicle miles do your vehicles run every month?

\_\_\_\_\_ miles

4. Are transportation services provided along a fixed route at regular times?

\_\_\_\_\_ Yes \_\_\_\_\_ No

5. [IF NO], Please explain how they operate. \_\_\_\_\_

---

---

---





6. Please describe the routes and schedules. Attach a separate sheet if necessary.

General Description	Facility	No. of Clients	Time to School	Time Home From School
<u>Example:</u> Quincy Ave/ Wisconsin St.	Moore School	8	8:30-9:30	3:30-4:30
a.				
b.				
c.				
d.				
e.				
f.				
g.				

7. Please complete the following chart for each school district you provide transportation to:

- a. How many trips do you purchase/week or month?  
b. At what cost?

School District	Number of Trips week or month	(\$ ) Cost



APPENDIX C

MATERIAL USED IN THE  
ASSESSMENT OF ALTERNATIVES





Table C-1

ESTIMATED COST PER VEHICLE MILE FOR  
DEMAND-RESPONSIVE SERVICES  
(in dollars)

(unionized labor)

Cost		Basis
<u>General Administration</u>	\$ .192	model prediction
<u>Capital Costs</u>		
Vehicles	.137	model prediction
Dispatch Equipment	.015	model prediction
<u>Operating Costs</u>		
Fuel	.170	\$1.60/gallon
Oil	.016	model prediction
Tires and Tubes	.019	model prediction
Vehicle Repair and Maintenance	.104	model prediction
Driver Wages and Fringe Benefits	.287	currently operating systems in region: \$6.00/hour + 18% fringe
Dispatcher Wages and Fringe Benefits	.071	model prediction
Insurance	.057	model prediction
Maintenance of Dispatch Equipment	.008	model prediction
Driver Examination Training	.007	model prediction
Vehicle Storage Costs	.026	model prediction
<b>TOTAL COST PER VEHICLE MILE</b>	<b>\$1.109</b>	

Source: Based upon: Armando M. Lago, Kenneth P. Ceglowski and Jon E. Burkhardt, A Study of Non-Urbanized Area Transit Assistance Requirements, prepared for U.S. Department of Transportation, UMTA, May 12, 1977, updated for inflation and labor type.

Table C-2

ESTIMATED COST PER VEHICLE MILE FOR  
FIXED-ROUTE SERVICES  
(in dollars)

(unionized labor)

Cost		Basis
<u>General Administration</u>	\$ .192	model prediction and administration costs of RTA's in Region
<u>Capital Costs</u>		
Vehicles	.137	model prediction
<u>Operating Costs</u>		
Fuel	.170	\$1.60/gallon
Oil	.016	model prediction
Tires and Tubes	.019	model prediction
Vehicle Repair and Maintenance	.104	model prediction
Driver Wages and Fringe Benefits	.287	currently operating systems in region: \$6.00/hour + 18% fringe
Insurance	.057	model prediction specific to Mass.
Driver Examination, Licenses, Training and Tags	.007	model prediction
Vehicle Storage Costs	.026	model prediction
<b>TOTAL COST PER VEHICLE MILE</b>	<b>\$1.016</b>	

Source: Based upon: Armando M. Lago, Kenneth P. Ceglowski and Jon E. Burkhardt, A Study of Non-Urbanized Area Transit Assistance Requirements, prepared for U.S. Department of Transportation, UMTA, May 12, 1977, updated for inflation and labor type.

Table C-3

ESTIMATED COST PER VEHICLE MILE FOR  
DEMAND-RESPONSIVE SERVICES  
(in dollars)

(non-unionized labor)

Cost		Basis
<u>General Administration</u>	\$ .192	model prediction
<u>Capital Costs</u>		
Vehicles	.137	model prediction
Dispatch Equipment	.015	model prediction
<u>Operating Costs</u>		
Fuel	.170	\$1.60/gallon
Oil	.016	model prediction
Tires and Tubes	.019	model prediction
Vehicle Repair and Maintenance	.104	model prediction
Driver Wages and Fringe Benefits	.144	currently operating systems in region: \$3.00/hour + 18% fringe
Dispatcher Wages and Fringe Benefits	.071	model prediction based on driver wages
Insurance	.057	model prediction
Maintenance of Dispatch Equipment	.008	model prediction
Driver Examination Training	.007	model prediction
Vehicle Storage Costs	.026	model prediction
<b>TOTAL COST PER VEHICLE MILE</b>	<b>\$ .966</b>	

Source: Based upon: Armando M. Lago, Kenneth P. Ceglowski and Jon E. Burkhardt, A Study of Non-Urbanized Area Transit Assistance Requirements, prepared for U.S. Department of Transportation, UMTA, May 12, 1977, updated for inflation and labor type.

Table C-4

ESTIMATED COST PER VEHICLE MILE FOR  
FIXED-ROUTE SERVICES  
(in dollars)

(non-unionized labor)

Cost		Basis
<u>General Administration</u>	\$ .192	model prediction and administration costs of RTA's in Region
<u>Capital Costs</u>		
Vehicles	.137	model prediction
<u>Operating Costs</u>		
Fuel	.170	\$1.60/gallon
Oil	.016	model prediction
Tires and Tubes	.019	model prediction
Vehicle Repair and Maintenance	.104	model prediction
Driver Wages and Fringe Benefits	.144	currently operating systems in region: \$3.00/hour + 18% fringe
Insurance	.057	model prediction specific to Mass.
Driver Examination, Licenses, Training and Tags	.007	model prediction
Vehicle Storage Costs	.026	model prediction
<b>TOTAL COST PER VEHICLE MILE</b>	<b>\$ .872</b>	

Source: Based upon: Armando M. Lago, Kenneth P. Ceglowski and Jon E. Burkhardt, A Study of Non-Urbanized Area Transit Assistance Requirements, prepared for U.S. Department of Transportation, UMTA, May 12, 1977, updated for inflation and labor type.

Table C-5

ESTIMATED COST PER VEHICLE MILE FOR  
DEMAND-RESPONSIVE SERVICES  
(in dollars)

(volunteer drivers and dispatchers)

Cost		Basis
<u>General Administration</u>	\$ .192	model prediction
<u>Capital Costs</u>		
Vehicles	.137	model prediction
Dispatch Equipment	.015	model prediction
<u>Operating Costs</u>		
Fuel	.170	\$1.60/gallon
Oil	.016	model prediction
Tires and Tubes	.019	model prediction
Vehicle Repair and Maintenance	.104	model prediction
Driver Wages and Fringe Benefits	.144*	currently operating systems in region: \$3.00/hour + 18% fringe
Dispatcher Wages and Fringe Benefits	.071*	model prediction based on driver wages
Insurance	.057	model prediction
Maintenance of Dispatch Equipment	.008	model prediction
Driver Examination Training	.007	model prediction
Vehicle Storage Costs	.026	model prediction
<b>TOTAL COST PER VEHICLE MILE</b>	<b>\$ .751</b>	

\*Driver and dispatcher wages have been eliminated since volunteer labor will be used.

Source: Based upon: Armando M. Lago, Kenneth P. Ceglowski and Jon E. Burkhardt, A Study of Non-Urbanized Area Transit Assistance Requirements, prepared for U.S. Department of Transportation, UMTA, May 12, 1977, updated for inflation and labor type.



Table C-6  
ESTIMATED COST PER VEHICLE MILE FOR  
FIXED-ROUTE SERVICES  
(in dollars)

(volunteer drivers)

Cost		Basis
<u>General Administration</u>	\$ .192	model prediction and admin- istration costs of RTA's in Region
<u>Capital Costs</u>		
Vehicles	.137	model prediction
<u>Operating Costs</u>		
Fuel	.170	\$1.60/gallon
Oil	.016	model prediction
Tires and Tubes	.019	model prediction
Vehicle Repair and Maintenance	.104	model prediction
Driver Wages and Fringe Benefits	.144*	currently operating systems in region: \$3.00/hour + 18% fringe
Insurance	.057	model prediction specific to Mass.
Driver Examination, Licenses, Training and Tags	.007	model prediction
Vehicle Storage Costs	.026	model prediction
<b>TOTAL COST PER VEHICLE MILE</b>	<b>\$ .728</b>	

\*Driver and dispatcher wages have been eliminated since volunteer labor will be used.

Source: Based upon: Armando M. Lago, Kenneth P. Ceglowski and Jon E. Burkhardt, A Study of Non-Urbanized Area Transit Assistance Requirements, prepared for U.S. Department of Transportation, UMTA, May 12, 1977, updated for inflation and labor type.

APPENDIX D

MATERIALS USED IN THE DEVELOPMENT  
OF THE FINANCIAL PLAN



POSSIBLE COST CATEGORIES

1. ADMINISTRATIVE COST CATEGORIES

- Labor
- Fringe Benefits
- Advertising Fees, Professional and Technical Studies  
Temporary Help, Custodial Services, Other Fees
- Materials and Supplies Consumed
- Utilities
- Casualty and Liability Costs - for corporation and liability insurance
- Taxes - Federal, state, property tax, other
- Purchase of Transportation Services
- Miscellaneous
- Expense Transfers
- Interest Expense
- Service Vehicle Lease
- Other Leases, Facilities and Equipment
- Depreciation on Service Vehicles
- Depreciation on Administrative Equipment and Facilities

2. MAINTENANCE COST CATEGORIES

- Labor
- Fringe Benefits
- Services - contract maintenance, temporary help
- Materials and supplies consumed - parts
- Utilities - propulsion power
- Casualty and Liability Costs - physical damage due and recovery
- Taxes on Propulsion Power
- Expense Transfers
- Leases on Maintenance Facilities and Equipment
- Depreciation on Maintenance Facilities and Equipment

3. OPERATING COST CATEGORIES

Vehicle Operating Costs Dependent upon Vehicle Miles

- Materials and Supplies Consumed - fuel and lubricants, tires and tubes
- Taxes - fuel and lubrication tax, other
- Expense Transfers
- Leasing Passenger Revenue Vehicles (depends on what lease agreement says)
- Depreciation of Revenue Vehicles

### Vehicle Operating Costs Dependent Upon Vehicle Hours

- Labor - driver
- Labor - dispatcher
- Fringe Benefits
- Services - temporary drivers/dispatchers, security services on vehicles
- Expense Transfers
- Leasing Passenger Revenue Vehicles (depends on what lease agreement says)

### Indirect Operating Expenses

- Services - technical studies, management services
- Vehicle Licensing and Registration
- Expense Transfers
- Leases on Garages/Storage/Passenger Stations, etc.
- Depreciation of Building Equipment

These classifications are easily aggregated to the UMTA Section 15 functional classification for the Level C systems (operation of 100 vehicles or less).

See Exhibit D-4 for descriptions of each item.

Source: Sue F. Knapp, Coordinating Transportation Services for the Elderly and Handicapped: Volume 2 - A Model Uniform Billing and Accounting System for Coordinated Transportation Systems, prepared for U.S. Department of Transportation, Office of the Secretary, May 1979.



**OPERATING COST GUIDELINES FOR  
SMALL URBAN AND RURAL AREAS**

	COST		
	Low	Middle	High
1. Wages per Year			
a. Manager	\$15,000	\$18,750	\$22,500
b. Secretary/bookkeeper	6,750	7,500	9,000
c. Telephone operation	5,625	6,750	7,875
d. Scheduler	8,060	9,000	10,875
e. Dispatcher	5,625	6,750	7,875
f. Mechanic	10,500	10,500	12,190
g. Mechanic's helper	5,625	6,750	7,875
h. Driver	8,060	9,575	10,875
2. Fuel, Oil, and Lubricants/Vehicle Mile			
a. Gasoline vehicles	\$ 0.105	\$ 0.137	\$ 0.157
b. Diesel vehicles	0.135	0.149	0.167
3. Repair Parts/Vehicle Mile			
a. Gasoline vehicles	\$ 0.033	\$ 0.043	\$ 0.050
b. Diesel vehicles	0.035	0.039	0.043
4. Insurance/Vehicle	\$ 2,000	\$ 2,500	\$ 3,500
5. Marketing	\$ 8,000	\$14,000	\$20,000
6. Office Operation (Supplies, etc.)	\$ 6,000	\$ 8,000	\$10,000
7. Utilities	\$ 9,000	\$12,000	\$18,000
8. Miscellaneous	\$ 5,000	\$ 6,500	\$ 8,000

Guidelines

- A. Fringe benefits would equal approximately 25-33 percent of the annual salary. The hourly rate is the annual salary divided by 2,080. The choice of high, medium, or low cost should be guided by prevailing local wages. Wages actually paid by the Section 147 projects were often substantially lower than those shown here, particularly for managers and mechanics.
- B. The cost of fuel, oil, parts, and lubricants will depend on the prevailing local cost of fuel, the type of vehicle, and the frequency of repairs. The medium cost figures assume that diesel fuel costs 90¢ per gallon and gasoline 95¢ per gallon. Fuel consumption is assumed to be eight miles per gallon for gasoline vehicles and six miles per gallon for diesel vehicles, depending on the size of the vehicle.
- C. The cost of marketing will depend on the locally determined size of the transit marketing program; however, being aggressive for good, positive marketing, is a key to the system's success. Marketing includes newspaper ads, radio and T.V. "spots," student education programs, route maps and schedules, public presentations, "nickel" (reduced fare) days, telephone information services, etc. See Florida Department of Transportation, A Marketing Analysis of Federal Highway Administration Rural Public Transportation 147 Demonstration Projects, prepared for the Federal Highway Administration (July 1979).
- D. The office operating cost will depend on staff size and economy of operation.
- E. The cost of utilities will depend on the size of the fleet and facilities and local utility rates.
- F. Miscellaneous costs will depend on the size of the fleet and its economy of operation.

Source: Schimpeler-Corradino Associates

SIX-MONTH TRANSITION BUDGET  
4/1/76 to 9/30/76

EXPENSES

Salaries*		
general mgr (w/fringe)		\$ 7,475.
secty/bookkeeper		1,500.
O. T. & sub. drivers		1,260.
Office Supplies		1,000.
Gas & Oil		2,400.
Comm. and Utilities		2,577.
(tel & rprr)	(2,067)	
(heat & light)	(510)	
Veh. Maint. & Repair		1,350.
Radio Maintenance		282.
Building Space		1,200.
Insurance		6,000.
Travel		400.
Depreciation		- .0 -
	SUB-TOTAL	<u>\$25,444.</u>
*Salaries/CETA		
dispatcher		4,500.
drivers (4)		17,000.
	TOTAL	<u>\$46,944.</u>

INCOME

Title III	\$19,083.
CETA	21,500.
LINKS	- 0 -
Title XX	- 0 -
DHA	1,200.
ASVP	1,500.
Contributions	3,661.
	<u>\$46,944.</u>
	TOTAL

Source: Dynatrend Incorporated, Nonurbanized Area Public Transportation:  
Student Workbook (Draft), prepared for FHWA and NHI, p. II-F-17,  
October 1980.

PROPOSED OPERATING BUDGET BY PROGRAM FOR FY 79

Item	Total	Regional D-R	Glou/Rock D-R	Glou/Rock Subscrip.	Regional Subscrip.
<u>Overhead Expense</u>					
<u>I. Personnel</u>					
General Manager	15,500	6,975	2,635	4,805	1,085
Admin. Sec./Bkbp.	10,500	4,725	1,785	3,255	725
Fringe	5,200	2,340	884	1,612	364
<u>II. Other</u>					
Travel	1,000	450	170	310	70
Office Equip.	900	405	153	279	63
Adver. & Mkt.	500	225	85	155	35
Legal & Audit	2,000	900	340	620	140
Postage	300	135	51	93	21
Subtotal	35,900	16,155	6,103	11,129	2,513
<u>Direct Operating Expense</u>					
<u>I. Personnel</u>					
Dispatcher (SCSEP)	4,000	1,800	680	1,240	280
Dispatcher (SCSEP)	4,000	1,800	680	1,240	280
Driver-Veh #1	4,500	3,240	0	0	1,260
Driver-Veh #1 (SCSEP)	3,500	3,500	0	0	0
Driver-Veh #2	8,000	0	0	8,000	0
Driver-Veh #3	4,500	4,500	0	0	0
Driver-Veh #3	4,500	4,500	0	0	0
Driver-Veh #4	8,000	0	6,000	2,000	0
Fringe	5,900	2,655	1,003	1,829	413
Sub. Drivers	3,000	900	340	1,620	140
<u>II. Other Direct Costs</u>					
Veh. Equip. (tires)	1,500	675	255	465	105
Gas and Oil	13,000	5,850	2,210	4,030	910
Maint. & Repair	5,000	2,250	850	1,550	350
Insurances	4,800	2,160	816	1,488	336
Licenses	150	68	26	46	10
Communications	2,500	1,125	425	775	175
Prtg. & Off. Sup.	2,000	900	340	620	140
Space	2,000	900	340	620	140
Utilities	500	225	85	155	35
Subtotals	81,350	37,048	14,050	25,678	4,574
TOTALS	117,250	53,203	20,153	36,807	7,087
<u>Program Costs Excluding</u>					
Subsidized Personnel	105,750	46,103	18,793	34,327	6,527
Shared-Ride Taxi	10,000				
Capital Replacement	12,000				

Source: Dynatrend Incorporated, Nonurbanized Area Public Transportation: Student Workbook (Draft), prepared for FHWA and NHI, p. II-F-39, October 1980.

Program, Acts or Statutes, & State Administrative Agency	Regional and Local Administrative Agencies	Eligible Users	Service Characteristics	Budgetary and Reporting Procedures
<u>Wisconsin DOT</u>				
1. <u>Van Trans.</u> under Sect. 85.08(5) <u>Wisc. Statutes</u> <u>Bureau of Transit</u>	County level. County Board designates a county agency to administer the program; often the Commission on Aging.	Elderly age 55 or older and handicapped.	Direct service; subsidies to other agencies; user-side subsidies; Use of driver escort (volunteer drivers), fixed route, & DRT buses. All purposes.	Annual allocation. Quarterly reports of trips and expenditures by source to WIS. DOT.
2. <u>Capital Grants</u> under <u>UMTA</u> , 16(b)(2) <u>Program and Sect.</u> 85.08(6) <u>Wisc. Stat.</u> <u>Bureau of Transit</u>	Competitive statewide. Open to any private non-profit corporation that will provide E&I service.	Local minimum age for elderly. All handicapped.	Must use vehicle(s). Third party contract for service possible if "full and effective control of vehicle is maintained." All purposes.	Applicant responsible for vehicle over its useful life. Detailed monthly report on use of each vehicle to WIS. DOT.
3. <u>Public Transit</u> under <u>UMTA</u> Sect. J, 5, & 18 and <u>Wisc. Stat.</u> 85.05 & 85.055 <u>Bureau of Transit</u>	Urban area of 2500 pop. or more. Cities and counties.			
a. <u>Specialized Services</u>		a. Generally restricted to E&I who are unable to use regular buses.	a. Direct service or contract for service subject to 13-C labor protection agreement. User-side subsidy. All purposes.	a. No special reporting requirements.
b. <u>Reduced Fare Programs</u>		b. Elderly age 55 or older and handicapped.	b. Regular bus or shared-ride taxi. All purposes.	b. Percentage of total trips by elderly.
<u>Wisconsin Dept. of Health &amp; Social Services</u>				
1. <u>Title III of the Older Americans Act and Sect. 46,80 Wisc. Stat.</u>	Regional-9 Area Agencies on Aging Local-"County Aging Unit" which is usually the Commission on Aging.	Elderly age 60 or over.	Direct service, contract for service or user-side subsidy. Often use volunteer drivers in rural areas. All purposes esp. shopping & social-recreation.	Projects funded as part of County Plan for 1980. Monthly reports of users, trips, and expenditures to AAA.
J. <u>Title-b, Social Services</u> <u>Bureau of Aging</u>				
b. <u>III-c, Nutrition Program</u> <u>Bureau of Aging</u>	County. Direct administration by county or purchase of services.	Elderly age 60 or over.	Direct service or contract for service. Usually, school bus type routing or volunteer driver (driver escort) program. Access to Nutrition Site as primary purpose.	Direct allocation to counties on population formula. Monthly reports on trans. use but trans. not a line item in budget.



Program, Acts or Statutes, & State Administrative Agency	Regional and Local Administrative Agencies	Eligible Users	Service Characteristics	Budgetary and Reporting Procedures
2. Vocational Rehabilitation Act of 1973 and Ch. 47 Misc. Statutes. Division of Voc. Rehabilitation (DVR).	Regional DVR Offices and local area counselors.	"Handicapped" who will benefit from vocational rehabilitation service.	No direct service, purchase of service for each individual from existing public & private sources. Often mileage or per diem payment to private individual. Voc. rehab. related purpose.	Transportation is itemized for voc. rehab. services but not for "diagnostic and instructive services."
<u>DHSS</u> 3. Title XX of the Social Security Act and Chs. 46, 49, and 51 Misc. Statutes. Div. of Community Services a. Social Services	DCS Regional Offices and County-level Departments of Social Services or Human Services.	Recipients of AFDC or SSI, Income eligible or group eligible--elderly 75 or older.	Direct--often by a social worker in an agency vehicle. Contract for service--often taxi or volunteer driver. For medical, grocery shopping or other life sustaining purpose.	Annual allocation. Report of services provided to each individual through SSIS but full reporting of trans. services is not achieved.
b. 51 Boards -51.42 Mental Health Board	DCS Regional Offices and County 51 Boards (unified or separate) or multi-county Unified 51 Boards.	Mental Health service users.	Minimal direct service. Contract for service--often taxi. For access to 51.42 Board facilities.	Annual allocation. Transportation not a line item in local budgets. No reporting of transportation services.
-51.437 Developmental Disabilities Board	same as 51.42 Board.	Developmentally disabled individuals.	Direct--often with school bus type routes to day service centers or sheltered workshops. Contract for service with public or private operators or volunteer drivers (driver escort).	Annual allocation. Trans. not usually a line item in local budget nor in contract for day services or sheltered employment. No reporting of trans. services.



Program, Acts or Statutes, & State Administrative Agency	Regional and Local Administrative Agencies	Eligible Users	Service Characteristics	Budgetary and Reporting Procedures
<p>DISS</p> <p>4. Title XVIII of the Social Security Act --Medicare Division of Health</p>	State level contract with private medical insurers--UPS, Blue Cross of Wisc., and Surgical Care.	Elderly 65 or older, disabled on SS disability for 2 years. Indiv. with kidney failure.	Emergency trans. only in ambulance or specialized medical vehicle.	Sum sufficient payment. Direct billing by private providers in some cases.
<p>5. Title XIX of the Social Security Act --Medicaid Division of Health</p>	County-level Depts. of Social Service and 51.42/51.437 Boards.	Recipients of AFDC or SSI.	Emergency trans. in ambulance, etc.; Trans. to medical appointments.	Sum sufficient payment, but allocations made to counties for budgetary purposes.
<p>Wisc. Dept. of Public Instruction</p> <p>1. Ch. 151.76 and 121.54(3) Wisc. Stats. --Trans. of Exceptional School Children</p>	Local school districts	Handicapped school children.	Direct provision or contract for service. School or special education trips only.	Annual payment by state of 70% of actual expenditures for approved pupils.
<p>U.S. Dept. of HEW Office of Education</p> <p>1. Head Start Prgs.</p>	HEW Regional Office and Local Agencies	Low income, minority, or handicapped preschool children.	Direct with school buses or vans or contract for service. School bus type routing.	Annual grant.
<p>U.S. Community Services Administration (CSA)</p> <p>1. Community Action Prgs.</p>	CSA Regional Office and Local Comm. Action Agencies.	Priority to low income but open to general public.	Direct. All purposes.	Competitive grant for carry-over money. Trans. not usually funded.

FUNDS AVAILABLE AT LOCAL LEVEL FOR E&H TRANSPORTATION

Agency and Funding Program	Calendar Year		
	1978	1979	1980
<u>Wis DOT</u>			
1. 85.08(5)			
State-	\$1,000,000	\$1,000,000	\$2,106,400 <sup>a</sup>
Local-	100,000	100,000	210,640
Total-	\$1,100,000	\$1,000,000	\$2,317,040
2. 16(b)(2)			
Federal-	\$ 415,000	\$ 471,000	\$ 377,000
State-	300,000	340,000	380,000
Total-	\$ 715,000	\$ 811,000	\$ 757,000
3. Public Transit			
a. Specialized Services			
LaCrosse-	\$ 17,000	\$ 17,000	\$ 18,000
Madison-	116,300	175,000	274,000
Racine-	24,000	60,000	60,000 <sup>b</sup>
Milwaukee-	--	325,000	324,600 <sup>b</sup>
Total-	\$ 157,300	\$ 577,000	\$ 676,600
b. Reduced Fare Programs (User Savings)	not estimated	\$1,244,000 <sup>c</sup> (260,400) <sup>d</sup>	
<u>DHSS</u>			
1. Title III			
a. III-b Social Services	\$ 438,900	\$ 537,500	
b. III-c Nutrition	\$ 614,000 (278,600) FY 1977	n.a.	
2. Vocational Rehabilitation			
a. Travel	\$ 823,127	\$ 782,200	
b. Diagnostic maintenance and travel	(474,255) <sup>e</sup>	(395,200) <sup>e</sup>	

<sup>a</sup> May be reduced by a possible short fall in state aids  
(Allocation for 1981 is \$2,354,800 state and \$235,480 local for a  
total of \$2,590,280)

<sup>b</sup> Up to \$600,000 could be allocated if eligible user group is expanded

<sup>c</sup> First three quarters of 1979 expanded to estimated annual level

<sup>d</sup> Total for 20 bus systems excluding Madison and Milwaukee

<sup>e</sup> Includes payments for lodging, meals, etc., as well as transportation  
for diagnostic and instructive services

Agency and Funding Program	Calendar Year		
	1978	1979	1980
3. Title XX			
a. Social Services and Human Services		\$1,582,000	n.a.
b. 51 Boards			
-51.42 Mental Health, etc.	\$3,198,500	\$1,305,000	
-51.437 Developmental Disabilities		<u>3,273,600</u>	n.a.
		\$4,578,600	
4. Title XVIII-Medicare	\$2,051,463	n.a.	n.a.
5. Title XIX-Medicaid	\$2,456,944	n.a.	n.a.
<u>Dept. of Public Instruction</u>			
1. Local School district services	\$8,902,520 <sup>f</sup>	n.a.	n.a.
<u>Other</u>			
1. Head Start Programs	n.a.	\$ 122,000 <sup>g</sup>	n.a.
2. Community Action Programs	n.a.	\$ 9,300 <sup>h</sup>	n.a.

<sup>f</sup> For 1977-78 school year

<sup>g</sup> For six programs in Wisconsin excluding Milwaukee

<sup>h</sup> Indianhead CAA in Rusk County

FUNDING, PLANNING, SERVICE, AND ADMINISTRATIVE CHARACTERISTICS  
OF E&H TRANSPORTATION PROGRAMS IN WISCONSIN

WISCONSIN DOT		Description of Overall Funding Allocation	Description of Transportation Fund Allocation	Matching Requirements	Maintenance of Effort
1. E&H Trans. Under Sect. 85.08(5) <u>Wisc. Statutes</u> Bureau of Transit		No non-transportation funds.	Appropriation in Biennial Budget. Annual Allocation to counties based on number of E&H in county. Minimum allocation of \$10,000.	Local (county)-10% of state allocation (cash)	County may not reduce existing county funds devoted to transportation service for E&H.
2. Capital Grants under UNTA.16(h)(2) Program and Sect 85.08(6) <u>Wisc. Stats.</u> Bureau of Transit		No non-transportation funds	Federal Grant plus state match.	Federal - 80% State - 20% (under current state program)	None
3. Public Transit Operating Assistance under UNTA. Sect 5.18 and Wisc. Sect. 85.05. Bureau of Transit (Specialized Services and Reduced Fare Program)		No non-transportation funds	State appropriation in Biennial Budget. Formula allocation to eligible transit systems.	Operating Deficit: Federal-up to 50% State -up to 72% of non-federal share Local-Balance of deficit	For urban areas the non-federal share shall at least equal the average paid for the two preceding calendar years (Section 18)
4. Capital Grants for Public Transit under UNTA Sect. 5.5&18 and Wisc. Sect. 85.055.		No non-transportation funds	State appropriation in Biennial Budget. Direct grants to cities and counties to purchase buses.	Federal-80% State -10% Local -10%	Not applicable
WISCONSIN DEPT. OF (DISS) HEALTH & SOCIAL SERVICES					
1. Title III of the Older Americans Act and Sect. 46.80 <u>Wisc. Stats.</u>		base to AAA: \$9,000 times number of counties in AAA. <u>Balance:</u> Distributed according to % of population 60+, and % of older enrolled Native Americans in AAA.	Local budgetary decision	Social Services under area plan State - 10% (in-kind) Local - none Other Services: State - 25% Local - none	Prohibition of reduction of expenditures, including non-federal share, from one year to the next.
a) III-b, Social Services Bureau of Aging					
b) III-c, Nutrition Program Bureau of Aging		Distributed according to % of low-income aged 60+ and % enrolled low-income Native American elderly in Area Agency on Aging	Same as III-b	Same as III-b	Same as III-b
2. Vocational Rehabilitation Act of 1973 and Ch. 47 <u>Wisc. Stats.</u> Division of Vocational Rehabilitation (DVR)		Budgetary Process-formula grants for Voc. Rehab. services. State allocation procedure is client based	Allocation is client-based	State - 20% Local - none	Federal - none State - none

Description of Overall Funding Allocation	Description of Transportation Fund Allocation	Matching Requirements	Maintenance of Effort
DHSS			
3. Title XX of the Social Security Act and Chs. 46, 49 & 51 Misc. Stat. Division of Community Services a) Social Services	Federal formula grants for social service programs for individuals and families  Local budgetary decision	Family Planning Services: State-10% (cash) Local-none Other Services: State-25% (cash) Local-none	County receives amount of Title XX funds equal to previous year contract and possible 4% increase. None for transportation.
b) 51 Boards -51.42 Mental Health Board	State grants-in-aid to county for total package of services  Not separated (in general)	County can provide as much funding as it wishes. For 1980 up to a 8% increase in county funds will be matched by state dollars	State requirement plus additional county dollars matched by state money
-51.437 Developmental Disabilities Board	Same as 51.42 Board	Same as 51.42 Board	Same as 51.42 Board
DHSS			
4. Title XIX of the Social Security Act -Medicaid Division of Health	Federal formula grants from HEW plus state supplemental funds  Line item in local service contract with state	State - 40% (cash) Local - none	None, Som sufficient funding.
HIS, DEPT. OF PUBLIC INSTRUCTION			
1. Ch. 151.76 and 121.54(3) Misc. Stats.-Transportation of Exceptional School Children	---  Sum sufficient funding	State - 70% Local - 30%	None.
U.S. DEPT. OF HEW			
1. Head Start Prgms.	Federal grant from HEW	Transportation generally not a line item in the local budget  Local - 10% (in-kind)	None.



State Plan Requirements	Local Plan Requirements	Public Review Process
<b>WISCONSIN DOT</b>		
1. <u>Full Transp. under Sect. 85.08(5) Wisc. Statutes Bureau of Transit</u>	None  Planning required as part of grant application procedure. Requires participation of County Aging Unit, and DD or 51 Board.	Public hearing required. Also review by Aging Unit or DD or 51 Board
2. <u>Capital Grants under UNTA, 16(b)(2) Program and Sect. 85.08(6) Wisc. Stats.</u>	None  Inclusion in Transit Improvement Program. Requires A-95 review.	Exhibit notifying all other transportation providers. Published public notice.
3. <u>Public Transit Operating Section 18 requires annual program of projects. Assistance under UNTA Sect. 5 &amp; 18 and Wisc. Sect. 85.05 (Specialized services and Reduced Fare Program)</u>	Urbanized areas-full urban transportation planning process required including TSM Plan. TDP recommended for non-urbanized areas.	Public hearing required on fare or substantial service changes. (Sect. 5). Documentation of public involvement. (Sect. 18)
4. <u>Capital Grants for Public Transit under UNTA Sect. 3, 5, &amp; 18 and Wisc. Sect. 85.055</u>	A-95 Review and for urbanized areas inclusion in TLP.	Public hearing required.
<b>WISCONSIN DEPT. OF HEALTH &amp; SOCIAL SERVICES-DHSS</b>		
1. <u>Title III of the Older Americans Act and Sect. 46.80 Wisc. Stats.</u>		
a) <u>III-b, Social Services Bureau of Aging</u>	Meeting of transportation coordination committee required prior to plan preparation.	State plan - public hearing required. County plan & AAA plan - public hearing required.
b) <u>III-c, Nutrition Program Bureau of Aging</u>	Same as III-b	Same as III-b
2. <u>Vocational Rehabilitation Act of 1973 and Ch. 47 Wisc. Stats. Division of Vocational Rehabilitation (DVR)</u>	Statewide plans establishing current policies w/respect to the scope and nature of transportation services and conditions, criteria & procedures  Develop service delivery plan for each client.	None required.

State Plan Requirements	Local Plan Requirements	Public Review Process
<p>DISS</p> <p>3. Title XX of the Social Security Act and Chs. 46.49 &amp; 51 <u>Wisc. Stats.</u> Div. of Community Services</p> <p>a) Social services</p> <p>Comprehensive Annual Services Plan developed from local CPB's</p> <p>CPB process required. Specific plans for transportation services included in CPB.</p> <p>Public Hearing Required.</p>		
<p>b) 51 Boards</p> <p>-51.42, Mental Health Board</p> <p>State Plan is composite of local plans from CPB process</p> <p>CPB process required, but transportation often is not identified as a separate service</p> <p>Public Hearing Required.</p>		
<p>-51.437, Developmental Disabilities Board</p> <p>Same as 51.42 Board</p> <p>Same as 51.42 Board</p>		
<p>DISS</p> <p>4. Title XIX of the Social Security Act-Medicaid Division of Health</p> <p>None</p> <p>In Social Service Agency contract w/ state, estimated yearly transportation money is included as a line item</p> <p>None</p>		
<p>WISC. DEPT. OF PUBLIC INSTRUCTION</p> <p>1. Chs. 151.76 and 121.54(3) <u>Wisc. Stats.</u> - Transportation of exceptional school children</p> <p>None</p> <p>None. Localities encouraged to develop policies on provision of transportation.</p> <p>None</p>		
<p>U.S. DEPT. OF HEW</p> <p>1. Head Start Programs</p> <p>Not a state level program.</p> <p>None in general. (Dane Co. has a local transportation plan)</p> <p>None.</p>		

Program Income	Financial Reporting Requirements	Monitoring and Reporting of Program Performance	Standards for Procurement of Supplies and Services	
WISCONSIN DOT				
1. E&I Trans. under Sect. 85.08(5) Wisc. Stats. Bureau of Aging	Can carry program income over into next year, but request that income stay within same program.	Quarterly: total cost of providing service for all 85.08(5) projects. Annual: capital and operating, extent to which funds are used to meet costs. All funds held in Co. treasury, and by trip purposes.	Quarterly report of county totals for Number of 1-way trips/mo: by Elderly - Ambulatory & non-amb. Non-Elderly - Ambulatory & non-amb.	None
2. Capital grants under UNTA.16(b) Program and Sect. 85.08(6) Wisc. Stats. Bureau of Transit	No requirement	Detailed financial information required in monthly summary of operating data.	Detailed data required for all grant recipients: -daily vehicle log -summary of operating data -vehicle specifications	State purchases vehicles and other equipment and sets the vehicle specifications
3. Public Transit and Operating Assistance under UNTA. Sect. 5 & 18 and Wisc. Sect. 85.05. Bureau of Transit (Specialized Services and Reduced Fare Program)	Income applied to reduce operating deficit.	UNTA Section 15 requirements apply. Quarterly reports to state of income and expenses.	Federal requirements under Section 15.	Labor protection under 13(c) applies to contracts for service with private providers.
4. Capital grants for public transit under UNTA Sect. 3, 5, and 18 and Wisc. Sect. 85.055.	Not applicable.	Not applicable.	Not applicable.	Federal specifications apply.
WISCONSIN DEPT. OF HEALTH & SOCIAL SERVICES (DHSS)				
1. Title III of the Older Americans Act and Sect. 46.80 Wisc. Stats. a) III-b, Social Services Bureau of Aging	Must be spent on service itself	Monthly reports to AAA by local aging unit on income and expenses	Monthly report by aging unit to AAA on number of clients served and units of service provided (round trips)	None
b) III-c, Nutrition Program Bureau of Aging	Same as III-b	Monthly reports to Bureau of Aging. No separate accounting for transportation costs.	No formal reporting requirements for transportation.	None.
2. Vocational Rehabilitation Act of 1973 and Ch. 47 Wisc. Stats. Division of Voc. Rehabilitation (DVR)	None.	Minimal.	None.	None.

Program Income	Financial Reporting Requirements	Monitoring and Reporting of Program Performance	Standards for Procurement of Supplies and Services
DISS			
3. Title XX of the Social Security Act and Chs. 46.49 & 51 of Wisc. Stats. Division of Community Services	a) Social Services	No state level policy	No separate requirements. Most non-contract transportation services are not charged as a transportation service
		Contract transportation services identified in Social Services Information System (SSIS)	County level standards
b) 51 Boards -51.42 Mental Health Board	None	Transportation not generally a line item in 51 Board budgets. nor in contracts for day services or sheltered workshop services that provide transportation. Transportation may be provided directly or through subcontracts.	County level standards
- -51.437 Developmental Disabilities Board	Same as 51.42 Board	Same as 51.42 Board	Same as 51.42 Board
DISS			
4. Title XIX of the Social Security Act -Medicaid Division of Health	None	Monthly billing based on cost of each trip.	None
WIS. DEPT. OF PUBLIC INSTRUCTION			
1. Ch.151.76 and 121.54(3) Wisc. Stats.-Transportation of Exceptional School Children	None	Board reports annually to DPI. Includes itemized statement of all receipts and disbursements on account of Special Education programs or services	Set by local school or planning area. Vehicle must be a school bus
U.S. DEPT. OF HEW			
1. Head Start Programs	None	No requirements for transportation. Have to get approval for capital expenditures	None



Eligibility and Definition of Elderly and Handicapped	Transportation Services	Fees or Contributions	Service Restrictions
1. <u>ESII Transp. Under Sect. 85.08(5) Wisc. Statutes, Bureau of Transit</u>	ESII Elderly; county may set definition as low as 55 Handicapped; those unable to use available transportation facilities	Can charge a fare.	Funds can only be used for elderly and handicapped
2. <u>Capital Grants under UMTA.16(b) Wisc. Stats. Bureau of Transit</u>	Priority given to service to ESII. Elderly; those defined as elderly for other programs not less than 55 Handicapped; those unable to use regular mass transit.	No restrictions	Depends on policies of the local provider
3. <u>Public Transit Operating Assistance under UMTA Sect. 5 &amp; 18 and Wisc. Sect. 85.05 Bureau of Transit</u> a) <u>Specialized Services &amp; Reduced Fare</u>	ESII Elderly; age 65 or older Handicapped; persons unable without special planning or design to use mass transit facilities and services as effectively as non-handicapped persons	Fares shall be comparable to regular fixed route fares. Reduced fare: State requires reduced fare for ESII during non-peak hours. Fare must not exceed 1/2 of adult peak hour fare	Specialized services to be functionally equivalent to fixed route services in terms of coverage, hours, and time with no trip purpose restriction
4. <u>Federal Capital Grants for Public Transit</u>	Not applicable.	Not applicable	Not applicable
WISCONSIN DEPT. OF HEALTH & SOCIAL SERVICES--DHSS			
1. Title III of the Older Americans Act and Sect. 46.80 Wisc. Stats. a) <u>III-b Social Services Bureau of Aging</u>	Elderly only. Elderly; Age 60+	No fares or fees allowed. Contributions are permitted and usually encouraged	States no restrictions Local agency may indicate limitations on service provision in funding proposal
b) <u>III-c Nutrition Program Bureau of Aging</u>	Elderly nutrition program participants only Elderly; Age 60+	Same as III-b	Same as III-b
2. <u>Vocational Rehabilitation Act of 1973 and Ch. 47 Wisc. Stats. Division of Vocational Rehabilitation (DVR)</u>	Division of Vocational Rehabilitation Clients DVR criteria for client eligibility	Fed. regulation that client and his family participate in transportation costs to the best of their ability	Transportation is provided only as a support service for regular vocational rehabilitation activities



Eligibility and Definition of Elderly and Handicapped	Transportation Services	Fees or Contributions	Service Restrictions
DISS			
3. Title XX of the Social Security Act and Chs. 46, 49 & 51 <u>Wisc. Stats.</u> Division of Community Ser. a) Social Services	AFDC recipients, SSI recipients, and income eligible persons Program not restricted to E&H.	Transportation to make it possible for eligible persons or families to travel to and from facilities and resources including trans. cost, meals where appropriate and attendants when necessary	No fares charged, contributions accepted  County must determine that transportation provided is not covered by other sources of funding before Title XX funds are used*
b) 51 Boards -51.42 Mental Health Board	51.42 Board clients (Alcohol or drug abuse, mental illness) Not on E&H Program	Generally limited to emergency situations or service to group homes	Included as part of total cost of service  No general standards
-51.437 Developmental Disabilities Board	51.437 Board clients New definition for the Developmentally Disabled is based on functional impairment in three or more areas of major life activity	Transportation of 51 Board clients to 51 Board services and sheltered workshops	Adult developmentally disabled are group eligible so no fee is charged  Generally limited to access to 51 Board facilities and 51 Board Program related activities
4. Title XIX of the Social Security Act-Medicaid Division of Health	All needy and low income including aged, blind, disabled, AFDC families. Eligibility determined locally using state guidelines Elderly: Age 60+	Emergency transportation such as ambulance; trans. on specialized medical vehicles, common carriers, etc. for medically related trans. Contract or volunteer drivers through County DSS	None  Restricted to eligible persons for medically related trans. Vehicles must meet requirements in DISS rules.
WIS. DEPT. OF PUBLIC INSTRUCTION			
1. Ch. 151.76 and 121.54(3) <u>Wisc. Stats.</u> -Transportation of Exceptional School Children	Any child with exceptional educational needs who requires special assistance in transportation Client must be evaluated by committee as a child with exceptional needs	Transportation to regular or special education classes or other educational services. Service may be direct or contracted	No fee permitted  Use of school buses required
U.S. DEPT OF HEW			
1. Head Start Program	Clients of Head Start Program Not applicable	School bus type service to and from Head Start Centers	None  Have to meet motor vehicle regulations pertaining to buses

ALTERNATIVE ACCOUNTING SYSTEMS

Using the accrual method, revenues are recorded when earned, regardless of whether they are received. Similarly, expenditures will be recorded as soon as they result in liabilities, regardless of when they are paid.

The accrual method is necessary when you are trying to allocate/bill costs for a particular service, since it allows you to work with both cost/revenue information and service information for the same month.

Similarly, the accrual method has the additional advantage from the standpoint of service delivery management of giving the manager a true picture of efficiency since (if you are judging on a monthly basis) service, ridership, and vehicle information for a particular month can be directly compared with cost and revenue for that month.

When accounting on a cash basis, revenue are not recorded until they are actually received and expenditures are not recorded until they are actually paid.

## EXPENSE ACCOUNTS

Expenses are the costs of providing the transportation services. Expenses include the costs of goods and services purchased by the transit system, as well as the costs of operating the system.

Expense accounts are presented in terms of the category of expense (i.e., labor, etc.) However, the accounts are disaggregated into subaccounts so that expenses may be aggregated into expenses by function (i.e., administration) for the computation of cost allocation/billing rates. As in the other accounts, the account numbers used in the Section 15 reporting system have been maintained. (However, in some cases, it has been necessary to add additional accounts

Expense accounts include:

- 501 Labor
- 502 Fringe Benefits
- 503 Services
- 504 Materials and Supplies Consumed
- 505 Utilities
- 506 Casualty and Liability Costs
- 507 Taxes
- 508 Purchased Transportation Service
- 509 Miscellaneous Expenses
- 510 Expense Transfers
- 511 Interest Expense
- 512 Leases and Rentals
- 513 Depreciation and Amortization

When using the Section 15 reporting system, these are the only accounts required with the exception that 1) labor must be broken into a) operators and b) other employee salaries, and 2) materials and supplies must be broken into a) fuel and lubricants, tires and tubes, and b) other materials and supplies.

The following is a definition of each account, as well as a description of the expense subaccounts required to compute the cost allocation/billing rates. Also included is a presentation of the distribution of subaccounts to functional categories.

## 501 Labor

This account covers pay and allowances due to employees in exchange for labor.,

Labor should be broken into the following subaccounts, as applicable:

- a. operators/drivers,
- b. aides or escorts to help riders,
- c. dispatchers/schedules,
- d. maintenance personnel, and
- e. administrative personnel.

[All labor costs are allowable]

## 502 Fringe Benefits

This account covers payments to others on behalf of an employee and/or direct payment to an employee arising from something other than his performance of work. As specified in Chapter 5, fringe benefits are computed as a percentage of direct labor. This is done by taking the total amount paid in fringe benefits and dividing by the total amount paid in direct labor. This percentage will be used to distribute fringe benefits among functions based on the direct labor allocated to that function.

Fringe benefits can be broken into the following subaccounts:

- a. FICA,
- b. pension plans,
- c. hospital, medical, surgical plans,
- d. dental plans,
- e. life insurance plans,
- f. short-term disability insurance plans,
- g. unemployment insurance,
- h. sick leave,
- i. holiday,
- j. vacation,



- k. other paid absence,
- l. other fringe benefits, and
- m. distribution of fringe benefits (total fringe benefits in all; used to distribute benefits as prescribed above).

[All of the above fringe benefit costs are allowable.]

### 503 Services

This category covers services provided by outside organizations for fees and related expenses.

Services should be broken into the following subaccounts as applicable:

- a. management service fees (operating management),
- b. advertising fees (labor and materials),
- c. professional and technical services,
- d. temporary help,
- e. contract maintenance services,
- f. custodial services,
- g. security services, and
- h. other services.

[All of the above costs of services are allowable. Some types of service may be subject to the approval of the grantor agency.]

### 504 Materials and Supplies Consumed

This account covers the cost of materials and supplies consumed from inventory or purchased for immediate use. Freight-in, purchase discounts, cash discounts, sales taxes, and excise taxes (except on fuel and lubricants) are to be included in the cost of the material or supply.

Materials and supplies consumed should be broken into the following subaccounts, as applicable:

- a. fuel and lubricants,
- b. tubes and tires,
- c. vehicle maintenance supplies and parts, and
- d. administrative materials and supplies.

[All costs of materials and supplies are allowable]

### 505 Utilities

This account covers payments made to utility companies for their resources (i.e., gas, telephone).

Utilities should be broken into the following subaccounts, as applicable:



- a. propulsion power,
- b. utilities on administrative facilities,
- c. utilities on maintenance facilities, and
- d. utilities on operating facilities (e.g., garages).

[The costs of utilities are allowable]

#### 506 Casualty and Liability Costs

This account covers the insurance costs for protecting the transit system from losses, compensation to others for their losses for which the transit system is liable, and actual losses to the transit system from accidents and other corporate losses. It also covers the recoveries of losses incurred by the transit system which are paid by the person or organization liable or by the insurance company.

Casualty and liability costs should be broken into the following subaccounts:

- a. premiums on physical damage,
- b. recoveries of physical damage losses,
- c. premiums for public liability,
- d. payouts for uninsured public liability and property settlement,
- e. provisions for uninsured public liability and property damage,
- f. payouts for insured public liability and property damage,
- g. recoveries of public liability and property damage settlements,
- h. premiums for other corporate insurance,
- i. other corporate losses, and
- j. recoveries of other corporate losses.

[The cost of insurance is allowable as long as the cost is reasonable. The cost of actual losses is allowable unless actual losses could have been covered by permissible insurance.]

#### 507 Taxes

This discount covers the taxes levied against the transit system by Federal, State, and local governments. Sales and excise taxes on materials (except on fuels or lubricants) should be included as the price of materials and not included here.

Taxes should be broken into the following subaccounts, as applicable:

- a. Federal income tax (on net income of transit systems),
- b. State income tax,
- c. property tax,
- d. vehicle licensing and registration fees,
- e. fuel and lubricant taxes,
- f. electric power taxes, and
- g. other taxes.

[Taxes or payment in lieu of taxes are allowable costs.]

#### 508 Purchased Transportation Service

This account covers payment to other transit systems for providing transportation services.

[The cost of purchasing transportation services are allowable, as long as the costs are reasonable.]

#### 509 Miscellaneous Expenses

This account covers all expenses not covered by the other major expense categories.

Miscellaneous expenses should be broken into the following expense categories, as applicable:

- a. dues and subscriptions,
- b. travel and meetings,
- c. tolls,
- d. entertainment expenses,
- e. donations,
- f. fines and penalties,
- g. bad debt expenses,
- h. media fees and expenses for advertising, and
- i. other miscellaneous expenses.

[The above costs are allowable except: dues and subscriptions to lobby organizations, entertainment expenses, donations or contributions, fines and penalties, and bad debt expenses.]

#### 510 Expense Transfers

This account is to be used for reporting adjustments and reclassification of expenses previously reported.

Expense transfer accounts are used to reclassify expenses from one function or one cost center to another.

#### 511 Interest Expense

This account covers charges for use of borrowed capital.

Interest should be broken into the following subaccounts, as applicable:

- a. interest on long-term debt, and
- b. interest on short-term debt.

[Interest expenses are not allowable costs except when authorized by Federal legislation]

#### 512 Leases and Rentals

This account covers payments for the use of capital assets not owned by the transit system.

Leases and rentals should be broken into the following subaccounts:

- a. transit way structures and equipment,
- b. passenger stations,
- c. passenger revenue vehicles,
- d. service vehicles,
- e. operating yards and vehicle storage facilities,
- f. engine house and vehicle maintenance facilities,
- g. other operating facilities, and
- h. other administrative facilities.

[The cost of leasing or renting facilities and equipment is allowable]

#### 513 Depreciation and Amortization

This account includes charges that reflect loss in service value of the transit system's assets.

Depreciation and amortization should be broken into the following subaccounts, as applicable:

- a. transit way structures and facilities,
- b. passenger stations,

- c. passenger revenue vehicles,
- d. service vehicles,
- e. operating yards and vehicle storage facilities,
- f. engine house and vehicle maintenance facilities,
- g. other operating facilities,
- h. other administrative facilities, and
- i. amortization of intangibles.

[The grantees may be compensated for the use of facilities and equipment through use allowances or depreciation except on property already depreciated or on the portion of property bought with Federal funds.]

**CHD TRANSPORTATION DEMONSTRATION PROJECT**  
**MONTHLY OUTLAYS AND EXPENDITURES**

PROJECT CODE:  

1. Project Name: \_\_\_\_\_

DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

SPECIFIC CATEGORIES	UNITS	QUANTITIES	DOLLAR COSTS
A.1 <u>Drivers</u>			
Paid Labor	hours		
Volunteers/In-Kind	hours		
A.2 <u>Dispatching</u>			
Paid Labor	hours		
Volunteers/In-Kind	hours		
A.3 <u>Fuel</u>			
Gasoline	gallons		
Diesel	gallons		
A.4 <u>Oil</u>	quarts		
A.5 <u>Repairs</u>			
Paid Labor	hours		
Volunteers/In-Kind	hours		
Parts and Tires			
A.6 <u>Insurance</u>	vehicles		
A.7 <u>Licenses</u>	vehicles		
A.8 <u>Leasing Expenses (pro-rates)</u>			
TOTAL OPERATING EXPENSES THIS MONTH:			
B.1 <u>Personnel</u>			
Paid Labor	hours		
Volunteers/In-Kind	hours		
B.2 <u>Advertising and Promotion</u>			
B.3 <u>Total Office Expenses</u>			
B.4 <u>Monitoring and Evaluation</u>			
TOTAL ADMINISTRATION COST THIS MONTH:			
C.1 <u>Purchase of Vehicles</u>			
Auto	vehicles		
Station Wagon	vehicles		
Van/Minibus	vehicles		
Small Bus (17-33 seats)	vehicles		
School Bus			
Less than 31 seats	vehicles		
31 seats and above	vehicles		
Transit bus (34 seats or more)	vehicles		
C.2 <u>Leasing of Vehicles (pro-rated)</u>			
C.3 <u>Plant and Facilities</u>			
Maintenance and Repair Shops			
Other Fixed Facilities			
C.4 <u>Special Equipment</u>			
Air Conditioning	units		
Radios	radios		
Wheel Chair Lifts	lifts		
TOTAL CAPITAL EXPENSES THIS MONTH:			



**OLD TRANSPORTATION DEMONSTRATION PROJECT**  
**MONTHLY REVENUE AND INCOME**

Project Name \_\_\_\_\_

PROJECT CODE:

DATE: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Revenue Income Sources (1)	One-Way Passenger Trips (2)	Revenues \$XX,XXX (3)
<b>1. OPERATING REVENUES:</b>		
1.a Cash fares - Regular		
1.b Cash fares - Discounted Fares		
1.c Contributions from Passengers		
1.d Preurchased Passes (tickets/stamps/tokens)		
1.e Charter Revenues		

**1.g Revenues from Packages & Meals  
Delivered [SPECIFY]**

1. Package Delivery	
2. Meals Delivery	
3. Post Office Bundles	

**1.h Other Operating Income  
[SPECIFY]**


**1.i TOTAL INCOME THIS MONTH:**

--

**1.f Revenues from Contracts with  
Agencies [SPECIFY]**


**2. GRANTS AND CONTRIBUTIONS (CASH  
AND IN-KIND)**

Source (1)	Revenues \$XX,XXX (2)


Project Code

1. Project Name \_\_\_\_\_

2. Month/Year \_\_\_\_\_ / \_\_\_\_\_

[illegible]

OHD TRANSPORTATION DEMONSTRATION PROJECT  
MONTHLY SUMMARY OF VEHICLE STATISTICS

PROJECT CODE

1. PROJECT NAME: \_\_\_\_\_

2. MONTH OF: \_\_\_\_\_ / \_\_\_\_\_

(3) Vehicle Type	(4) Days of Service	(5) No. of Vehicles Operated	(6) Vehicle Miles	(7) Seat Miles	(8) Deadhead Miles	(9) Passenger Trips	(10) Passenger Miles	(11) Vehicle Hours
Auto (01)								
Station Wagon (02)								
Van/MiniBus (03)								
Small Bus (04)								
School Bus (05)								
Transit Bus (06)								
Others (Total)(07)								
Monthly Totals All Vehicles								

## OFFICE USE

1.	Project	
2.	Vehicle No.	
3.	Vehicle Type	
4.	No. of Seats	
5.	Date	
6.	Driver	
7.	Agency	

[illegible]

Total Hours	
13.	
Total Miles	
14.	
Total Passengers	
15.	

[illegible][illegible]

# VEHICLE REPORT

Operator \_\_\_\_\_

\_\_\_\_\_ Qtr., 19 \_\_\_\_\_

Purchase Program \_\_\_\_\_

Vehicle # \_\_\_\_\_  
(indicates special equipment and capacity)

Odometer mileage \_\_\_\_\_

Variable Cost	Unit Cost	X	Units This Quarter	=	Direct Cost
Labor	\$				\$
Maintenance (Routine)					
Parts, oil					
Fuel					
Depreciation (____%)					
Accidents, Breakdowns (attach reports)					
Insurance					
Other					
	Total Variable Cost to Operate \$				
<u>Component Services</u>	Allocated Cost	+	Total Component Units	X	Units this Vehicle = Share of Allocated Cost
	\$				\$
Total Allocated Fixed Costs					\$
TOTAL COST TO OPERATE					\$

Vehicle miles this quarter \_\_\_\_\_

\$/mi. \$ \_\_\_\_\_

Vehicle hours this quarter \_\_\_\_\_

\$/hr. \$ \_\_\_\_\_

Unscheduled hours out of service \_\_\_\_\_

Full Days in service: Scheduled \_\_\_\_\_  
This quarter \_\_\_\_\_

Form #4

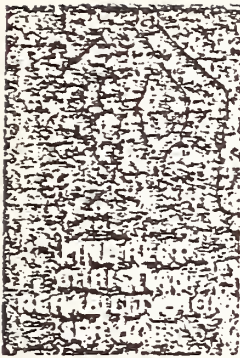


APPENDIX E

SUPPORTING MATERIALS FOR  
IMPLEMENTING THE SERVICE



Exhibit E-1: SAMPLE LETTER  
OF AGREEMENT



16) 455-5000

6850 DIVISION AVENUE, S. GRAND RAPIDS, MICHIGAN 49508

February 24, 1977

Mr. Ray Hinkel  
Grand Rapids Transit Authority  
1151 Sheldon, S.E.  
Grand Rapids, MI

Dear Mr. Hinkel:

This letter is to indicate Pine Rest Christian Rehabilitation Services support and agreement with the HEW-OHD - Transportation Demonstration Project. It is a letter of intent to participate in the Demonstration Project within the limits of our understanding of the operational concepts and contracts that we have with other agencies.

- I. We understand and permit the Grand Rapids Area Transit Authority (G.R.A.T.A.) to perform as the lead agency, recipient of grant funds and administrator of grant funds.
- II. With respect to the Management and Operation coordination concepts, we agree to participate in the following ways:

A. Outreach Information Referral.

G.R.A.T.A. will provide necessary information relative to eligibility requirements. We will allow G.R.A.T.A. to perform information and referral services.

B. Centralized Maintenance Concept

We will participate in a preventive maintenance program if it is cost effective. We will allow G.R.A.T.A. or a mutually agreeable outside contractor to perform, schedule, and administer preventive maintenance programs if they are cost effective. We will reimburse G.R.A.T.A. or mutually agreeable outside contractors appropriate amounts for maintenance services and supplies, if it cost effective.

C. Centralized Purchasing

We will participate with and formulate a centralized purchasing program including fuel and lubricants; vehicle parts and supplies; and vehicle purchasing, if it is cost effective. We will purchase fuel from G.R.A.T.A. at the present rate of \$.36 per gallon. It is further understood that the rate of agency reimbursement may

fluctuate if prices change from the wholesale supplier.

D. Centralized Dispatching

We will commit our vehicles and drivers to be dispatched by G.R.A.T.A. personnel during the hours of 6:00 a.m. to 6:00 p.m. Monday through Friday as available. We will allow two-way radios to be installed in our vehicles. It is further understood that these radios will be purchased under the demonstration grant. We will allow other participating agencies' clients to be transported in our vehicles as space allows. We will reimburse G.R.A.T.A. for transportation services provided to our clients at a mutually agreeable rate, if it is cost effective. We will be reimbursed by G.R.A.T.A. for transportation services for agency clients at a mutually agreeable rate.

III. The undersigned or his designate, James Veltman, will provide information necessary to help implement the HEW-OHD transportation demonstration grant concepts.

I would like to reiterate that it is our intent to cooperate and assist in any way we can in the development of the transportation demonstration project as long as there is no degradation of service or increase in cost to our clients.

 Sincerely,

~~Administrative~~ Administrative Director

EMB/sd

Exhibit E-2: SAMPLE INTERAGENCY AGREEMENT

C O N T R A C T

*Agreement between Agency and Company for  
purposes of demonstrating methods of con-  
solidating specialized transportation  
services in Howard County, Maryland*

This Agreement is made this day of February 28, 1977,

by and between the Howard County Maryland  
Agency

having its offices at Court House, Ellicott City, Maryland  
Address of Agency

hereinafter designated the "Agency" and the Urban Rural Trans-  
portation Alliance of Howard County, Maryland, Inc., with  
registered offices at 8950 Route 108, Columbia, Maryland 21045,  
hereinafter designated as the "Company". Any individual who  
receives benefits of the program of the Agency is hereinafter  
designated as "client". The terms of the Agreement are to full-  
fill the obligations of the Company and the Agency to carryout  
a two-year demonstration project under a grant provided by the  
Department of Health, Education and Welfare, Office of Human  
Development, hereinafter designated as the "grantor". The terms  
of the grant are attached hereto and made a part hereof.

In consideration of the mutual promises and covenants contained  
herein, the Company and the Agency agree as follows:

1. The Company will provide transportation services for the Agency as specified in Sections eight and nine. The Company will also provide transportation for any of the supportive services offered through the Agency, i. e., trips to health centers, shopping areas, recreational and vocational centers as long as such services are scheduled within the time period specified in Section 10. The Agency and the Company will service all special functions requested by the Agency if vehicles are available.
2. The Company shall comply with all Federal, State and local laws and regulations governing transportation. The Company shall comply with all applicable Federal, State and local laws and regulations pertaining to wages and hours of employment; and anti-pollution regulations and standards. The Agency shall have the right to inspect the Company's vehicles, schedules, facilities, scheduling procedures and employment practices.
3. The Company shall carry automobile insurance in the minimum amount of: Bodily injury liability, \$250,000 each person, \$500,000 each occurrence; property damage liability, \$100,000 each occurrence; medical payments, \$2,500 per person; comprehensive, no deductible; collision, \$100.00 deductible; uninsured motorist, \$20,000 per person and \$10,000 each accident on each vehicle.



4. The Company shall keep full and accurate records. All such records shall be kept on file for three (3) years after the end of the Federal fiscal year to which they pertain or any other period in excess thereof, which the Grantor or Agency may designate. The Agency or the auditors of the Agency, upon request, shall have access to all such records for audit and review at reasonable time and place. The Company shall maintain all records required by the Department of Health, Education and Welfare.
5. The Company agrees that, in the performance of this contract, it will not discriminate against any person on account of age, ancestry, color, handicap, national origin, race, religious creed or sex and that the Agency, upon receipt of satisfactory evidence of such discrimination, shall have the right to cancel said contract.
6. The Agency agrees that, in the performance of this contract, it will not discriminate against any person on account of age, ancestry, color, handicap, national origin, race, religious creed or sex and that the Company, upon receipt of satisfactory evidence of such discrimination, shall have the right to cancel said contract.
7. It is mutually agreed between the parties that neither party shall be held responsible to the other for any losses resulting from its delay for failure to perform to the extent that the said party is delayed or prevented by Federal, State or municipal action; war, revolution, riot, or other disorder; strike or other labor problem; fire, flood, Act of God, or without limiting the foregoing, by any other cause not within the control of the party whose performance is interfered with, and which by the exercise of reasonable diligence, the party is unable to prevent, whether of the class of causes herein before enumerated or not.
8. The Agreement shall be effective for the period of 1977 to 1979 and during such additional period or periods as the Company and Agency may agree upon in writing, to be signed by both parties. Such document shall be attached to the original contract. However, either party may at any time during the life of the Agreement or any extension thereof, terminate this Agreement with respect to the delivery of transportation services by giving sixty (60) days notice in writing to the other party of its intention to do so, and the Agency may terminate this Agreement with respect to the delivery of transportation services if the terms and conditions hereof are not fully complied with by the Company by giving ten (10) days notice in writing of its intentions to do so. In the event that the Company fails to provide adequate transportation over a period of time to be mutually agreed upon by the Agency representative and Company representative, the Agency may procure transportation elsewhere, and charge the cost of such replacement transportation to the Company when the cost of such replacement shall not exceed an amount mutually agreed on by the parties. If the parties fail to mutually agree the Company Board of Directors will have final decision power regarding discrepancies. Said decision shall be binding on all parties. This Agreement shall not be effective until such time as the Agency agrees to participate in the transportation service and the Agency has provided the Company with a copy of duly executed Agreement. The Company shall have no obligation to perform under this Agreement, and this Agreement shall not be effective until such time as the Company has received written notice that it has been approved by the Grantor, i.e., the Department of Health, Education & Welfare.

9. The Company shall provide transportation services to the Agency sites located in Hinman County  
~~(from an neighborhood)~~  
as listed above, and described in Appendix "A" which is hereby attached and incorporated. Other Agency sites may be added to with the concurrence of the Company, or any of the Agency sites listed above may be eliminated from this Agreement by giving two weeks notice in writing to the Company. The Company representative, with the concurrence of the Company Board of Directors, may also terminate service to any site by giving two weeks written notice to the Agency.
10. Transportation will be provided hours per day, Monday through Friday, at the time specified by the Agency, except in such circumstances when the locations are required to close due to weather conditions which the Agency representative and the Company representative agree are serious enough to be deemed unsafe for travel in the particular site area, holidays as stipulated in Appendix "B", by decision of the individual site governing body, if such exists, or by Presidential directive.
11. The Agency agrees to lease vehicles which it owns or operates to the Company for the duration of this contract and additional periods as agreed upon. Cost of the lease agreement shall be determined when transfer of vehicles takes place. On turning vehicles over to the Company or back to the Agency, a third party assessor will be asked to survey the condition of each vehicle and to provide a certified and notarized assessment of the condition, value and expected remaining mileage of the vehicle under expected operating conditions. A copy of this assessment will be held by each party. Vehicles to be transferred are listed in Appendix "C" which is hereby attached and incorporated.  
  
Further, the Company promises to utilize the vehicles leased to it by the Agency for the purpose of demonstrating the consolidation of specialized transportation services by utilization of a centralized dispatching and management organization. For this purpose the Agency agrees to allow the installation of special two-way radio equipment in the vehicles which it leases to the Company and relinquishes all rights to possession or ownership of such equipment. The Company will reimburse the Agency for any damage to vehicles which the Company leases caused by removal of radio equipment.
12. The Company will bill the Agency monthly at the rate of \$ 176.00 a month for 12 months. The fiscal arrangements of this Agreement are based upon an initial payment of \$ . The total payment will be \$ 2108.00 for the term of this contract. The Company reserves the right to renegotiate these arrangements annually based on current consumer price indexes.
13. The Agency shall make such payment to the Company on the basis of monthly invoices on or before the 15th day of the month following the calendar month for which services are provided. That the Agency shall not be obligated to receive or pay for any transportation if, by notice to the Company before 3:00 p.m. on the day prior to delivery of services; the Agency requested that such transportation not be provided and the Agency shall not be obligated to pay for transportation which does not meet the prescribed requirements.
14. The Agency agrees to consign any contractual agreement in regard to transportation which it now is contractually bound to, to the Company for the term of this Agreement. This means that the Company promises to assume the responsibility for implementing the promises and covenants contained therein. Such contractual obligations which are hereby consigned to the Company are described in Appendix "D" which is hereby attached and incorporated. Any fiscal arrangements connected with this paragraph will be incorporated in the above Sections 12 & 13.

15. The Company and the Agency shall agree upon mutual arrangements for review and evaluation of the performance of the Company and the Agency in the implementation of this Agreement. Such arrangements may include requirements of the Grantor during the period of the demonstration project. These arrangements shall take place at least on one occasion during each quarter of the term of the contract.
16. The Agency shall be represented on the Board of Directors of the Company as required by the By-Laws of the Company.
17. This Agreement constitutes the entire Agreement between the Company and the Agency with respect to the subject matter hereof and there have been no further written or oral agreements with respect hereto.

No variation or modification of this Agreement, and no waiver of its provisions shall be valid unless in writing and signed by the duly authorized officers of the Agency and the Company. No assignment or transfer of this Agreement may be made, in whole or in part, without the written consent of the Agency being first obtained.

Date

BY Will. A. Altman — 2/21/77

BY William A. Altman, County Administrator

# SENIOR NEIGHBORS incorporated

A UFGS AFFILIATE AGENCY

*to make living more beautiful*

1024 TRUST BUILDING, GRAND RAPIDS, MICHIGAN 49503

February 24, 1977

Mr. Ray Hinkle  
Grand Rapids Transit Authority  
1151 Sheldon Ave., S.E.  
Grand Rapids, MI 49507

Dear Mr. Hinkle:

Senior Neighbors, Inc. submits this letter for inclusion in the HEW-OHD proposal, as our statement of support for the overall goal of more effective and comprehensive transportation services for Kent County.

Because specific implementation plans are necessary before Senior Neighbors can define its possible role in the demonstration, and these plans have not yet been ascertained, we cannot commit specific resources or total participation in the project. However, Senior Neighbors is supportive of the efforts made thus far, and should the grant concepts and implementation represent an appropriate role for Senior Neighbors, we would willingly re-evaluate our position.

Our community is in definite need of a more comprehensive transit system, and to that end, Senior Neighbors pledges our cooperation with the other agencies in so far as our resources allow.

Sincerely,

Executive Director

jcb



URBAN RURAL TRANSPORTATION  
ALLIANCE OF HOWARD COUNTY, MARYLAND, INC.

FIRST: We the undersigned: T. Glynne Williams, M.D.  
3414 Pierce Drive  
Ellicott City, MD 21043

Wilfred C. Wright  
Downside  
Ellicott City, MD 21043

Lawrence H. Stier  
9477 Farewell Road  
Columbia, MD 21045

each being at least twenty-one years of age, do hereby associate ourselves as incorporators with the intention of forming a non-profit corporation under and by virtue of the General Laws of the State of Maryland.

SECOND: The name of the corporation (which is hereinafter called the Corporation) is the URBAN RURAL TRANSPORTATION ALLIANCE OF HOWARD COUNTY, MARYLAND, INC.

THIRD: The Corporation is organized exclusively for charitable, educational and benevolent purposes as defined and limited by Section 501 (c) (3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law), including, but not limited to:

(a) to initiate, coordinate and/or operate a transportation system for persons who lack personal or public transportation resources, and priority will be given to the needs of the elderly, the handicapped, and the low-income and for volunteers to social service projects.

(b) to receive funds by government, State, County and Federal, and private grants and from other social service providers, donations, bequests or otherwise holding, investing, dispersing the same; charging and receiving compensation for services for the purpose only of maintaining such service and not for profit. To enter into contracts with other social service providers when consistent with the purpose listed herein.

(c) to purchase or otherwise acquire, lease as lessee, invest in, hold, use, lease as lessor, encumber, sell, exchange, transfer, and dispose of property of any description or any interest therein, by authority and action of its Board of Directors.

Urban/Rural Transportation Alliance of Howard County, Md., Inc.,  
HEW Transportation Demonstration Program (Second Year Proposal),  
prepared for the Office of Human Development, U.S. Department  
of Health, Education, and Welfare, May 1978.



(d) to borrow money, and issue, sell, and pledge its notes, bonds, and other evidence of indebtedness, and to secure any of its obligations by mortgage, pledge, or deed of trust of all or any of its property, by authority and action of its Board of Directors.

No members of the Corporation shall receive any pecuniary gain or profit, incidental or otherwise, from its activities, except that the Corporation shall be authorized to pay reasonable compensation for services rendered and to make payments in furtherance of the purposes set forth in Item III hereof. No substantial part of the activities of the Corporation shall not participate in or intervene in (including the publishing or distribution of statements) any political campaign on behalf of any candidate for public office. The Corporation shall not carry on any activity not permitted to be carried on (1) by a Corporation exempt from Federal Income Tax under Section 501 (c) (3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law) or (2) by a corporation, contributions to which are deductible under Section 170 (c) (2) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law).

FOURTH: The Corporation is to have perpetual existence.

FIFTH: The Corporation is organized on a non capital stock basis.

SIXTH: The post office address of the principal office of the Corporation in this State is : 8950 Route 103, Columbia, Maryland 21045. The name and post office address of the resident agent of the Corporation in this State are Andrew M. Gregg, 8950 Route 103, Columbia, Maryland 21045. Said resident agent is an individual actually residing in this State.

SEVENTH: If the Corporation is to be dissolved or liquidated, the Board of Directors shall, after paying or making provision for the payment of all of the liabilities of the Corporation, dispose of all of the then remaining assets of the Corporation to such organizations as then qualify as an exempt organization under Section 501 (c) (3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law.)

EIGHTH: The incorporators may choose the first members of the Board of Directors in accordance with the By-Laws. Members may resign or be removed, vacancies may be filled and additional members elected, as provided in the By-Laws, which may prescribe different classes of members and prescribe the powers and duties of each class.

IN WITNESS WHEREOF, we have signed these Articles of Incorporation on this            day of            , 1977.

WITNESS:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

STATE OF MARYLAND, COUNTY OF            . to wit:

THIS IS TO CERTIFY that on this            day of            , 1977  
before me the subscriber, a Notary Public of the State of Maryland, in  
and for the County aforesaid, personally appeared \_\_\_\_\_,  
\_\_\_\_\_ and \_\_\_\_\_,  
and severally acknowledged the foregoing Articles of Incorporation to be  
their respective act.

Witness my hand and Notarial Seal the day and year last written  
above.

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires:

Exhibit E-5

SAMPLE JOB DESCRIPTION FOR COUNTY COORDINATOR

1. Administering the 85.08(5) programs;
2. Updating and maintaining the inventory of existing E&H transportation services;
3. Work with the Health Care Center to consolidate vehicles including contractual arrangements and agency approval. Arrange for operation of consolidated system.
4. Working with health and social service agencies and programs to establish a clearinghouse for exchanging transportation services among them. This will include developing contracts with agencies, setting rates and schedules, etc.
5. Establishing coordinated maintenance and purchasing procedures;
6. Being responsible for managing the clearinghouse function including vehicle routing and scheduling;
7. Seeking to continually identify and apply for new funds available for E&H transportation services;
8. Working with existing agencies to identify transportation needs in the community;
9. Maintaining contacts with agencies and the public to keep them informed of activities, services and aims of the project;
10. Being responsible to the supervisor at the COA and also report to the County Coordinating Committee on relevant issues;
11. Performing other activities as identified by the County Coordinating Committee or County Administrator; and
12. The coordinator should probably have a B.A. or B.S. degree in business or public administration or transportation planning and/or equivalent experience in transportation or management.

## Exhibit E-6: Insurance Purchasing

**Insurance.\*** Vehicle insurance may vary greatly from agency to agency. While some of this variation can be ascribed to vehicle seating capacities and the terms of the policy (liability limits, collision coverage, etc.), much of it may be due to the terms offered by different insurance companies. Significant savings are also possible when agencies jointly purchase insurance. Each policy will have an annual premium cost, which can be converted into an annual cost per vehicle. Then, by taking into account the different coverage limits and average vehicle seating capacity for each agency, they can assess which of the policies seem to have the most favorable terms. Once this activity is concluded, a comprehensive set of insurance specifications can be developed that is satisfactory to all agencies. The policy specifications can then be submitted through a broker or agent to all insurance companies that are interested in the business. The lowest rates submitted can then be compared to the present premiums paid by all agencies in order to make a decision about coordinated vehicle insurance.

The process is fairly straightforward. However, because of the nature of insurance underwriting, it is impossible to predict whether a better rate can be achieved through the procedure.

There are a number of factors that may help agencies achieve better rates, including the following:

- Volume purchasing seems to offer a potential for reduced rates, although this is by no means certain.
- It may be advantageous to approach a new insurance agency or a broker who is not currently doing business with local agencies but who is recommended by other agencies.
- Good driver hiring procedures and training programs may induce the insurance company to reduce rates. Thus, driver training programs may have important cost benefits and are encouraged.
- It may be advantageous for agencies to use their other insurances—health, life, or property—as leverage.

Shopping around is the key to the insurance question. Once specifications are agreed upon and drawn up, it is relatively simple and cost-free to solicit bids from different insurance companies.

Source: Applied Resources Integration, Ltd, Planning Guidelines for Coordinated Agency Transportation Services, prepared for HEW/OHDS, April 1980. Prepared in conjunction with Social Service Research Institute.

\* For further information on insurance and social service agencies, see the three-volume series prepared by HEW/Human Development Services Transportation Initiative: *Proceedings White House Workshop on Transportation Insurance* (January 1979); *New Insurance Programs for Human Service Transportation Providers, Technical Advisory No. 1* (August 1979); *National Work Plan to Resolve the Transportation Insurance Problems* (August 1979).

## Centralized Storage

Centralized storage is not necessary for coordinated maintenance, but it offers increased convenience and the potential for more reliable service. Centralized storage can have these advantages:

- It provides greater back-up vehicle availability.
- It provides a wider range of vehicle types for various service needs.
- It can allow the joint maintenance and servicing of vehicles: cleaning, washing, gasoline, oil, inspection, etc.

Centralizing storage facilities is a means of providing the best physical situation at a reasonable cost. Ideally, this means having all vehicles parked indoors in a safe location. The major disadvantage of the concept is that vehicles may not be easily accessible to all locations. In a rural area, central storage may necessitate long deadheading to a central facility thus making the concept too costly for agencies' benefit.

Analysis of the joint storage concept should, therefore, address the following questions:

- Is there any facility now being used by an agency that is large enough to house all of the participants' vehicles? If not, can a new facility be purchased, leased, or rented, or even borrowed or donated, that will provide indoor facilities and services at a price not exceeding the total cost now being paid by all the providers?
- Are there adequate services, including bus washers, fuel pumps, inspection areas, etc., for performing daily maintenance?
- Will the location create problems in coordinating maintenance or dispatching?

Each agency must study these questions and determine whether a joint storage facility can meet its needs.

Source: Applied Resources Integration, Ltd.,  
Planning Guidelines for Coordinated  
Agency Transportation Services, prepared  
for HEW/OHDS, April 1980. Prepared in  
conjunction with Social Service Research  
Institute.



# CENTRAL DISPATCHING

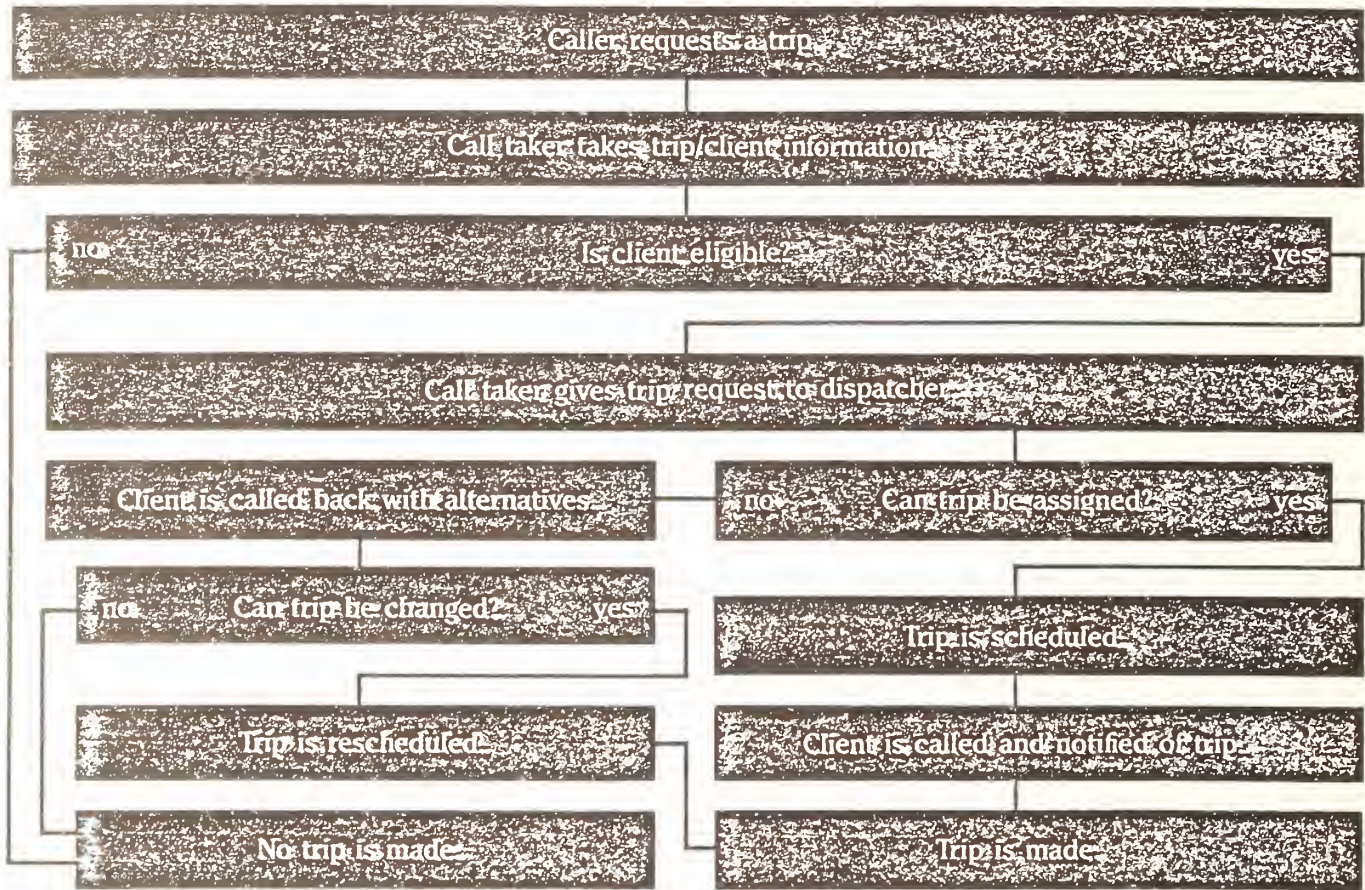


FIG 14. Central Dispatching: Trip Assignment Procedure.

The central dispatching office controls the operations of all participating agency vehicles, thereby eliminating the need for duplicative routing and scheduling functions.

The central dispatching office attempts to make maximum use of participating agency vehicles while maintaining the level of service to provider agency clients. It can also provide new services for purchaser agency clients through ride-sharing and time-sharing. All provider agency vehicles are controlled by a single dispatching office, which is responsible for all routing and scheduling of trips. This office has the ability to arrange the delivery of services, within the limits set through agreements, and to maximize vehicle use. The central dispatcher is able to do more than an operations clearinghouse, in that it can provide a wider variety of services with a minimum of difficulty.

## How Central Dispatching Works

Central dispatching places the control of daily vehi-

cle operations for all participating provider agencies under one office. The four key areas in a central dispatching system are client communication, intra-office communication, trip assignment, and dispatching/vehicle communications. An outline of this system is presented in Figure 14.

The *client communication* component is maintained by a call taker, who provides the liaison between the callers and the system. Just as in the operations clearinghouse, the call taker records the requisite information for transmittal to the persons doing the actual trip scheduling and dispatching. In addition to this function, a call taker may also provide information, verify the eligibility of the caller, take cancellations, respond to complaints, and call no-show clients to find out if the trip is still wanted. The call taker should be given the trip request card to ensure that adequate information is collected.

After the call taker has booked a trip request, this request is forwarded to the dispatcher for assignment. *Intra-office communication* between call takers and dispatchers should be simple and may be facilitated by the use of properly designed trip request



forms. The offices of the call takers and dispatchers should be separate but in close proximity.

Beyond their basic call-taking and trip-assignment functions, central dispatching systems may vary significantly, according to the size of the operation and type of trip being dispatched.

For immediate-response trips, the trip request must be conveyed immediately from the call taker to the dispatcher, since in such a system time is crucial to a proper response. With advance-notice services, the situation changes. Because all trip requests are booked in advance, the call taker can also perform scheduling activities for the next day's tours. If trip requests are limited to the morning and early afternoon of the day preceding the trip, trip assignments can be made at the end of the day for use the next morning. In such systems, the dispatching function becomes like a monitoring system, making sure that all the pre-assigned trips are accounted for (as trips completed, no-shows, etc.).

The next step following transmission of the service request from the call taker to the dispatcher is trip-assignment—matching the request for service to a vehicle with capacity for that trip. Trip assignment, as was noted above, is done either by advance notice or immediately, depending upon the characteristics of the system. It includes the completion of dispatcher logs (Figure 15) and driver trip sheets for advance-notice systems, or immediate assignment to a vehicle in operation for immediate-response systems.

Trip assignment requires that the client be assigned to a vehicle that will provide a reasonable travel time for the trip and will be reasonably on schedule. Arrival times are usually given with a "window"; that is, the time is given with the understanding that the vehicle may arrive within a set period of that time (usually  $\pm$  10–20 minutes).

Following vehicle assignment, the trip assignment must be relayed to the appropriate driver. If any changes have been made in the request, the client must be notified. Communication with the drivers in an advance-notice system must be made in the morning before the vehicles leave on tour. This communication consists of the driver assignment sheets. During the day, each driver should telephone in, or use the radio on a vehicle if there is one, to get any updates or to report any cancellations or no-shows. In immediate-response systems, the dispatcher contacts the drivers via radio informing them of the next scheduled trip or any deviations in the current tour.

Once the assignment is made, the driver will make the trip called for and log it in on a driver trip log (Figure 16). This completes the activities of the central dispatching office.

## Establishing the Central Dispatching Office

Many agency transportation programs have a variety of trip-making needs that cut across such service types as subscription, advance notice, and immediate response. Thus, to establish the type of operations control required of the central dispatching office, the implementation manager should collate the following pieces of information:

- What types of services are currently being offered by each agency, and what types of services will be required of the coordination project?
- How many vehicles will be included?
- Do the vehicles have radios or not?
- Will the agencies be calling for reservations, or will individuals make their own calls for trips?

The answers to these four questions will help determine the structure of the central dispatching function. First, the number of vehicles and types of services offered by each agency will be major indicators. In general, most local areas will find that they have a variety of services and will have to consider some kind of balanced approach to the delivery of service. To achieve this, a system should begin with the coordination of subscription and advance-notice services and then gradually work in immediate-notice services as the system stabilizes and increases its efficiency.

**Staff.** Office staffing will be determined by the services provided and the method of accepting trip requests. If the agencies collect trip requests and call them in, rather than having individual clients call, the number of call takers for the system will be reduced. Also, agencies will have stricter control over who uses the services than they would if the clients called in themselves. However, this will increase the number of persons involved in the total trip-making process and will reduce the effectiveness of the central dispatching office.

Basically, the central dispatching office requires the following: call takers, dispatcher/schedulers, administrator/bookkeeper, office space, and communications equipment.

The director of the project should estimate the number of calls that could be expected, based upon the information of the participating agencies, and have the appropriate number of persons assigned to the job. The number of call takers can be estimated based upon the number of vehicles available for assignment and the type of service offered. In general, a call taker with an immediate-response system can book trips for 15 vehicles; with an advance-notice system, 20 or more. For subscription services, call

DISPATCHER LOG

Date \_\_\_\_\_

[illegible]

### Sample Dispatcher Log.

taking and dispatching can be accomplished by one person. In a system with 10 or fewer vehicles, it is probable that the call taker can also carry out the dispatching function. This is a good possibility with advance-notice systems; in an immediate-response system, it depends upon the volume of calls.

The rules for employing dispatchers follow from those for call takers. That is, a dispatcher can handle about 15 vehicles in an immediate notice system and 20 or more in an advance-notice system. In small systems (fewer than 10 vehicles) the dispatcher's job can be combined with that of call taker.

**Equipment.** Besides telephone lines, the most important elements of communications equipment are vehicle radios and a base station. The use of a participant's radio equipment would eliminate the time-consuming process of applying for and receiving an FCC radio license, but the equipment should be used only if it can meet the design needs of the service.

All attempts should be made to locate the office for

the dispatching center in the offices of one of the participants. Needed are quiet work spaces for the call takers and dispatchers. These spaces should be set up with the telephone and radio equipment, desks, and maps of the service areas. There should be enough wall and table space for making up and posting vehicle assignments.

**Administration.** The administrative responsibilities of a central dispatching system are limited to overall supervision of the immediate staff and daily book-keeping and accounting of all trips taken on the vehicles. The actual supervision of drivers and maintenance of vehicles is conducted by the participating provider agencies, who retain these functions. Thus, the administrator will probably need to devote only part of his time to day-to-day supervision; the rest of his time can be given to preparing management information and billing and accountability records for each agency. The manager could be an employee from one of the provider agencies, preferably from the same agency that houses the office.



## Training

Agencies providing transportation often have a variety of training programs for their drivers, dispatchers, and call takers. Some of these programs are given by agency personnel, based upon agency procedures, while others are given by outside agencies such as the Red Cross or the Heart Association. It is possible for these programs, whether given on an ad hoc basis as new employees are hired or on a regular "refresher" basis, to be coordinated among agencies. Coordinated training can allow agencies to exchange ideas and develop better training programs. Depending upon the resources and staffing available, programs can be coordinated so that employees of various agencies can participate at one time.

In work for the Department of Health, Education, and Welfare, and the Department of Transportation, the University of Tennessee has examined driver training and identified seven basic skill areas:<sup>1</sup>

1. *General driving skills.* The ability to maneuver a vehicle under varying conditions.
2. *Accident avoidance skills.* Defensive driving.
3. *Passenger assistance skills.* Helping passengers to reach, to board, and to leave a vehicle with special regard to individual needs.
4. *Human relations skills.* Being sensitive to emotional conditions of patients and being able to make the trip more than just a ride.

<sup>1</sup>Davis, Frank, "Selecting and Training Drivers for Human Service Agencies (Employees, Volunteers, and Contractors)" DRAFT., Transportation Service Research Center, University of Tennessee, Knoxville, Tennessee, November 1979.

5. *Emergency first aid skills.* Administering first aid in emergency situations prior to the arrival of medical assistance.

6. *Non-medical emergencies.* Understanding safety and standard operating procedures with regard to vehicle breakdowns or other major service delays.

7. *Basic transportation operation skills.* Being knowledgeable about basic organizational operating procedures and service measurements.

This training is specifically aimed at the vehicle operator but other training programs and packages have been developed for other employees of coordinated transportation operations. For the most part, agency training programs occur on an ad hoc basis, since new people are hired at irregular intervals. As a result, most individuals doing training do so only as an adjunct to regular work, so that agencies would not be able to eliminate a position if training were coordinated. However, coordinated programs could offer the benefits of shared information and experiences.

Coordinated training would also be a logical addition to any coordination project involving vehicle operations. A coordinated training program could ensure proper handling of all clients from the agencies, adequate bookkeeping and record keeping, and overall a more reliable service.

Source: Applied Resources Integration, Ltd., Planning Guidelines for Coordinated Agency Transportation, prepared for HEW/OHDS, April 1980. In conjunction with Social Service



MARKETING  
FOR SUCCESSFUL PUBLIC TRANSPORTATION

PETER M. SCHAUER  
CONSULTANT  
BOONVILLE, MISSOURI 65233

MOST PEOPLE THINK MARKETING MEANS ADVERTISING. ADVERTISING IS ONLY ONE ASPECT OF MARKETING. MOST TRANSIT MARKETING MANAGERS DEFINE MARKETING TO INCLUDE: SERVICE DEVELOPMENT (SERVICE ANALYSIS AND PLANNING, SERVICE CHANGE IMPLEMENTATION), MARKET RESEARCH, PROMOTION (ADVERTISING, PUBLIC RELATIONS), CUSTOMER SERVICES (RIDER INFORMATION, CUSTOMER AND COMMUNITY RELATIONS, SPECIAL SALES).<sup>1</sup> THESE FUNCTIONS ARE SHOWN IN MORE DETAIL IN FIGURE ONE. IT IS IMPORTANT TO REALIZE THAT MARKETING FUNCTIONS INCLUDE OR EFFECT JUST ABOUT EVERY ASPECT OF A TRANSIT SYSTEM FROM THE WAY THE TELEPHONE IS ANSWERED TO THE COLOR OF THE VEHICLES. SMALLER SYSTEMS WILL HAVE MOST OF THE MARKETING FUNCTIONS ASSIGNED TO THE CHIEF EXECUTIVE OFFICER, BUT AS A SYSTEM BECOMES LARGER AND ITS MARKETING NEEDS BECOME MORE COMPLEX THE DEVELOPMENT OF A MARKETING DIVISION BECOMES NECESSARY.

SOMETIMES OPERATIONS PERSONNEL RESENT MARKETING PERSONNEL BEING INVOLVED IN ROUTE CHANGES AND TRADITIONAL OPERATIONAL MATTERS. HOWEVER THE ESSENCE OF SUCCESSFUL MARKETING IS TO ENSURE THAT ALL TRANSIT PERSONNEL ARE MARKETING ORIENTED.

EVERYONE IN THE ORGANIZATION MUST BE AWARE OF THE MARKETING GOALS AND UNDERSTAND HOW THEIR ACTIONS AND DECISIONS WILL IMPACT ON THE CONSUMER AND COMMUNITY. EVEN IF DECISIONS ARE RATIONAL ON THE SURFACE, IF THEY IGNORE THE BASIC FEELINGS AND EMOTIONS OF THOSE THE SERVICE IS INTENDED TO SERVE IT WILL BE DIFFICULT TO CULTIVATE BROAD COMMUNITY SUPPORT.

BROAD COMMUNITY SUPPORT IS NECESSARY TO ENHANCE AND MAINTAIN A SUCCESSFUL SYSTEM. EVEN NON-RIDERS MUST HAVE AN ACCEPTABLE OPINION OF THE SYSTEM TO CONTINUE OR EXPAND FUNDING. ESPECIALLY IN NEW SYSTEMS IT IS IMPORTANT TO DEVELOP SOME SORT OF FORMAL COMMUNITY ADVISORY OR GOVERNING BODY TO HELP ENCOURAGE COMMUNITY SUPPORT. THE DEVELOPMENT OF THIS SORT OF GROUP WILL HELP INSURE THAT THE COMMUNITY HAS A SENSE OF OWNERSHIP AND THAT THE SYSTEM MOVES TO MEET COMMUNITY GOALS. THE COMMUNITY AND TRANSIT CONSUMERS SHOULD BE INVOLVED IN THE DESIGN OF THE SYSTEM. IF THEY ARE INVOLVED FROM THE BEGINNING IT IS LESS LIKELY TO HAVE AN END AND WILL BE MORE LIKELY TO BE A USEFUL ASPECT OF THE COMMUNITY'S SERVICES. ANOTHER REASON FOR INVOLVING CONSUMERS IN THE TRANSIT PROJECT RESTS IN THE NOTION THAT MARKETING AND ESPECIALLY THE FUNCTIONAL AREA OF PROMOTION, INSPIRED AMATEURS CAN USUALLY OUT PERFORM PROFESSIONALS. IF A PARTNERSHIP CAN BE CREATED DURING THE DESIGN OF THE SYSTEM BETWEEN THE PROFESSIONAL STAFF AND THE COMMUNITY ADVISORY GROUP THE CHANCES OF SUCCESS WILL INCREASE. IF THE PROFESSIONAL STAFF CAN IDENTIFY WHAT IS TECHNICALLY POSSIBLE FOR A GIVEN COMMUNITY AND THEN HAVE A COMMUNITY GROUP REACT AND INDICATE WHAT IS POLITICALLY AND SOCIALLY POSSIBLE A SUCCESSFUL SERVICE IS ALMOST CERTAIN TO DEVELOP.

CREATING THE COMMUNITY COMMITTEE IS A COMMUNITY RELATIONS PROBLEM IN ITSELF. SOMETIMES THE COMMITTEE ALREADY EXISTS AND MANAGER MUST THEN MOTIVATE IT AND DEVELOP A POSITIVE RELATIONSHIP. A MORE DIFFICULT SITUATION EXISTS WHERE THE MANAGER MUST HUNT AND CREATE THE COMMITTEE FROM NOTHING. IN THAT CASE SOME SUGGESTED MEMEBERS OF THE COMMITTEE WOULD BE:

1. REGULAR USER OF EACH SERVICE TYPE THAT SYSTEM PROVIDES.
2. REPRESENTATIVE OF LOCAL RETAILERS.
3. SOMEONE EXPERIENCED IN BANKING AND COST CONTROL.
4. REPRESENTATIVES OF KEY RACIAL AND ETHNIC GROUPS.
5. REPRESENTATIVES OF LOCAL GOVERNMENT.
6. REPRESENTATION FROM YOUTH, WOMEN, AND THE ELDERLY.<sup>2</sup>

OTHER IMPORTANT GROUPS MAY BE IDENTIFIED AND THEY SHOULD BE ADDED WITH CARE TO KEEP THE SIZE OF THE GROUP WORKABLE. SPECIAL ATTENTION SHOULD BE GIVEN TO GEOGRAPHIC BALANCE AND THE ENTIRE COMMUNITY SHOULD BE REPRESENTED.

WITH A FIRM COMMUNITY BASE THE SYSTEM MANAGERS CAN MOVE THROUGH A SERIES OF STEPS TO CREATE A MARKETING PLAN. THE RECOMMENDED STEPS ARE: GOAL SETTING, ESTABLISHMENT OF OBJECTIVES, CREATION OF STRATEGIES TO MEET OBJECTIVES, ACTION PLAN AND BUDGET, AND EVALUATION OF EFFORTS. THIS APPROACH IS ROUGHLY EVIDENT IN THE MARKETING SKETCH PLAN CONTAINED IN APPENDIX A. APPENDIX B CONTAINS A REFINEMENT ON A SINGLE OBJECTIVE OF A MARKETING PLAN. SUCH A REFINEMENT IS NECESSARY FOR EACH MAJOR ELEMENT OF THE PLAN. EACH STEP WILL BE DISCUSSED AND THE REMAINDER OF THIS PAPER WILL OUTLINE A FRAMEWORK TO HELP DEVELOP A MARKETING PLAN.

GOAL SETTING THIS STEP INVOLVES DETERMINING WHERE YOU WANT TO BE IN THE MINDS OF THOSE WHO VIEW AND USE THE TRANSIT SYSTEM.

TWO KEY ELEMENTS AT THIS STEP ARE "AUDIENCE ANALYSIS" AND "POSITIONING." FOR THE DESIRED AUDIENCE.

AUDIENCE ANALYSIS IS DETERMINING WHO OR WHAT GROUPS YOU WANT TO REACH WITH THE VARIOUS GOALS OF YOUR MARKETING EFFORT. IF YOUR SYSTEM'S GOAL IS TO OFFER SPECIAL SERVICE TO THE ELDERLY THEN YOUR MARKETING EFFORTS WILL NEED TO BE DIRECTED AT THAT PORTION OF THE AUDIENCE OR MARKET. AUDIENCE ANALYSIS IS A PART OF MARKET RESEARCH. KNOWING WHO YOUR CENTRAL MARKET IS IS OFTEN THE MOST DIFFICULT STEP IN DIRECTING A MARKETING EFFORT.

POSITIONING IS A PROCESS WHERE MARKETING MANAGERS TRY TO PLACE A PRODUCT OR SERVICE IN THE CONSUMERS MIND IN A DELIBERATE MANNER SO AS TO CREATE PRODUCT ACCEPTANCE OR USE.

"WHAT IS POSITIONING?" YOU CAN DEMONSTRATE THE BASIC PRINCIPLE BY ASKING YOURSELF A FEW QUESTIONS.

WHO WAS THE FIRST PERSON TO FLY SOLO ACROSS THE NORTH ATLANTIC? CHARLES LINDBERGH, RIGHT? NOW CAN YOU NAME THE SECOND PERSON TO FLY ACROSS THE NORTH ATLANTIC. NOT SO EASY, IS IT?

WHAT'S THE NAME OF THE HIGHEST MOUNTAIN IN THE WORLD? MOUNT EVEREST IN THE HIMALAYAS, RIGHT?

NOW, WHAT'S THE NAME OF THE SECOND HIGHEST MOUNTAIN IN THE WORLD?

THE FIRST PERSON, THE FIRST MOUNTAIN, THE FIRST COMPANY TO OCCUPY THE POSITION IN THE PROSPECT'S MIND IS GOING TO BE AWFULLY HARD TO DISLODGE. -

IBM IN COMPUTERS, HERTZ IN RENT-A-CARS, COCA IN COLA.

IF YOUR COMPANY OR BRAND IS NOT THE FIRST TO OCCUPY THE POSITION IN THE PROSPECT'S MIND, THEN YOU HAVE A POSITIONING PROBLEM. YOU MUST RELATE TO THE LEADER'S POSITION IF YOU HOPE TO MAKE PROGRESS."

ONCE A POSITION IS IDENTIFIED THAT THE SYSTEM WILL SEEK, ALL OTHER MARKETING EFFORTS CAN BE DESIGNED TO BE CONSISTANT WITH THAT POSITION.

1. WHAT POSITION, IF ANY, DO WE ALREADY OWN IN THE PROSPECTS MIND?
2. WHAT POSITION DO WE WANT TO OWN?
3. WHAT COMPANIES MUST BE OUT-GUNNED IF WE ARE TO ESTABLISH THAT POSITION?
4. DO WE HAVE ENOUGH MARKETING MONEY TO OCCUPY AND HOLD THE POSITION?
5. DO WE HAVE THE GUTS TO STICK WITH ONE CONSISTENT POSITIONING CONCEPT?
6. DOES OUR CREATIVE APPROACH MATCH OUR POSITIONING STRATEGY?"4

WITH THESE SORT OF QUESTIONS MANAGERS CAN DETERMINE WHAT THE SYSTEM'S GOALS WILL BE AND A GENERAL STRATEGY FOR MEETING THOSE GOALS.

ESTABLISHING OBJECTIVES OBJECTIVES SHOULD BE SPECIFIC AND IF AT ALL POSSIBLE MEASURABLE. FOR EXAMPLE IF A SYSTEM DECIDES TO POSITION ITSELF AGAINST THE PRIVATE AUTOMOBILE THEN IT MIGHT DECIDE TO ESTABLISH AN OBJECTIVE TO SHOW A REDUCTION OF SO MANY AUTOMOBILES ON A GIVEN BRIDGE DURING RUSH HOUR. OBJECTIVES NEED TO BE CLEARLY UNDERSTOOD BY THE ENTIRE ORGANIZATION, DRIVERS AND ALL STAFF MUST KNOW WHAT THE SYSTEM HOPES TO ACHIEVE. THIS WILL HELP TO INCREASE EMPLOYEE INVOLVEMENT AND MAY GENERATE SOME VALUABLE SUGGESTIONS FOR IMPROVING THE MARKETING EFFORT.

CREATION OF STRATEGIES TO MEET OBJECTIVES ONE OF THE HOPED FOR RESULTS OF THE MARKETING EFFORTS DESCRIBED IN THIS PAPER IS THAT ALL ELEMENTS SHOULD BE IN HARMONY AND INTEGRATED TO MEET THE POSITIONING GOAL. THIS ESPECIALLY APPLIES TO PROMOTIONAL EFFORTS. FOR EXAMPLE IF THE SYSTEM POSITIONED ITSELF AGAINST THE AUTOMOBILE, THE CREATION AND WIDE ADVERTISEMENT OF PARK AND RIDE LOTS WOULD FIT THE SELECTED POSITION. STRATEGIES TO MAKE THE SYSTEM'S BROCHURES SIMILAR IN APPEARANCE TO AUTOMOBILE MANUALS MIGHT FURTHER ENHANCE THE SELECTED POSITION.



CREATING STRATEGIES TO FIT AND BRING ABOUT A SELECTED POSITION IS AN EXCELLENT AREA TO ALLOW FREE IMAGINATION TO FLOW. ADVERTISING, CONFERENCES, NEWS STORIES, CARRY-IN-DINNERS ALL MIGHT BE USED SOMEHOW TO HARMONIOUSLY BRING ABOUT YOUR SELECTED POSITION. CREATING STRATEGIES IS A PLACE WHERE THE CITIZEN ADVISORY GROUP CAN BE USED TO A GREAT ADVANTAGE. THEY MAY HAVE IDEAS WHICH YOU HAVE NEGLECTED TO CONSIDER.

ACTION PLAN AND BUDGET AN ACTION PLAN IS A DOCUMENT, PREFERABLY FOR A ONE YEAR PERIOD, THAT SPECIFIES WHAT MARKETING ACTIVITIES THE SYSTEM WILL BE INVOLVED WITH ON A MONTHLY BASIS. BEFORE COMPLETING AN ACTION PLAN THE SYSTEM SHOULD HAVE GONE THROUGH THE PREVIOUS STEPS AND HAVE A FIRM IDEA OF WHO THEIR MARKET IS AND WHAT POSITION THEY WANT IN THAT MARKET. A SYSTEM SHOULD ALSO HAVE ESTABLISHED OBJECTIVES FOR THAT MARKET AND HAVE DETERMINED STRATEGIES TO MEET THOSE OBJECTIVES.

IN FINALIZING THE ACTION PLAN, FOR MOST SYSTEMS, THE "PULSE" APPROACH TO PROMOTION AND ADVERTISING OFTEN GIVES THE BEST RESULTS. THE PULSE APPROACH PLACES YOUR EFFORTS BEFORE YOUR MARKET IN BURSTS RATHER THAN TRICKLING IT OUT ALL THE TIME. THIS CAN BE VISUALIZED BY IMAGINING THE PLACEMENT OF QUARTER PAGE NEWSPAPER ADVERTISEMENTS FOR FOUR WEEKS IN A ROW VERSUS THE PLACEMENT OF A FULL PAGE ADVERTISEMENT FOR ONE WEEK AND THEN SKIPPING OR PLACING A CLASSIFIED ADVERTISEMENT FOR THREE WEEKS. THE THEORY IS THAT YOU WILL GET MORE RESULTS FROM BURSTS OF INFORMATION THAN FROM A TRICKLE OF INFORMATION.

THE PULSE APPROACH HAS THE FURTHER ADVANTAGE OF ALLOWING THE SYSTEM TO MAINTAIN ITS SERVICE DEVELOPMENT AND RESEARCH

FUNCTIONS AT SOME LEVEL AND THEN INCREASING THE EFFORT FOR A PERIOD AND THEN SLOWING THE EFFORT TO EVALUATE THE RESULTS AND THEN INCREASING THE EFFORT AGAIN TO FIT THE DESIRED POSITION AND INCLUDING ANY CHANGES THAT THE LAST PULSE MAY HAVE DICTATED.

THE PULSE APPROACH PERMITS USEFUL COORDINATION WITH OTHER COMMUNITY SERVICES MARKETING EFFORTS. IF YOUR SYSTEM IS SEEKING THE SENIOR CITIZEN MARKET THEN YOU CAN PULSE YOUR EFFORTS IN COORDINATION WITH YOUR LOCAL AGING AGENCIES. PULSING ALSO HELPS YOU TO PIGGYBACK ON OTHER AGENCIES MARKETING EFFORTS.

BUDGETING FOR THE ACTION PLAN WILL AGAIN DEPEND ON LOCAL CONDITIONS. IN SOME LOCALES PUBLIC AGENCIES ARE NOT ENCOURAGED TO HAVE MARKETING BUDGETS PER SE. IN ONE AREA AN AGENCY WAS NOT PERMITTED TO ADVERTISE THE AVAILABILITY OF TITLE XX MONIES BECAUSE OFFICIALS WONDERED WHY ANYTHING THAT IS FREE SHOULD BE ADVERTISED. IN UNFAVORABLE CLIMATES LIKE THOSE SOMETIMES ELEMENTS OF THE MARKETING EFFORT CAN BE PLACED IN THE BUDGET USING SOCIAL SERVICE NOMENCLATURE SUCH AS "INFORMATION AND REFERRAL". EVEN IF THE CLIMATE FOR A MARKETING EFFORT IS TOTALLY NEGATIVE SOME ELEMENTS OF AN ACTION PLAN ARE COMPLETED AS A NORMAL COURSE OF BUSINESS ANYWAY AND ALL THAT MAY BE NEEDED IS TO BE SURE THAT THE STYLE WITH WHICH THEY ARE DONE FITS THE OBJECTIVES SOUGHT. ALSO MANY MARKETING ELEMENTS ARE FREE (EXCEPT FOR STAFF TIME). NEWSPAPER ARTICLES, RADIO TALK SHOWS, CHURCH PAPERS, ARE ALL FREE IF YOU CAN FIT THEIR FORMAT AND NEEDS.

IT IS BEST TO HAVE SOME IDEA OF THE DOLLARS AVAILABLE BEFORE THE MARKETING OBJECTIVES ARE CREATED. IF YOUR OBJECTIVE

IS TO HAVE DOOR TO DOOR INFORMATION WORKERS BELIEVER 20,000 BROCHURES AND YOUR BUDGET ONLY HAS ENOUGH FUNDS FOR 10,000 BROCHURES. THEN OBVIOUSLY THE OBJECTIVE WILL NOT FIT THE FUNDING AVAILABLE. THE BUDGET FOR THE PROMOTION AND COMMUNITY RELATIONS PORTIONS OF YOUR EFFORT WILL THEREFORE NEED TO BE DEVELOPED SIMULTANEOUSLY WITH THE CREATION OF OBJECTIVES. THE MARKET RESEARCH AND SERVICE DEVELOPMENT EFFORTS HOPEFULLY CAN BE RECOGNIZED AS BASELINE ACTIVITIES AND THEREFORE BE INCLUDED IN THE GENERAL AND ADMINISTRATIVE BUDGETS IN SMALLER SYSTEMS AND WOULD BE ITEMIZED ONLY IN MORE COMPLEX LARGER SYSTEMS.

EVALUATION OF MARKETING EFFORTS MARKETING IS AN ENDEAVOR THAT NEEDS CONSTANT EVALUATION. MARKETING OFTEN TAKES ADVANTAGE OF WHAT IS HAPPENING AT THE MOMENT SO IT IS IMPORTANT TO EVALUATE EFFORTS OFTEN. WITH THE CURRENT GASOLINE PROBLEMS MANY PROMOTIONAL OPPORTUNITIES HAVE BECOME AVAILABLE TO MARKETING MANAGERS WHICH WERE NOT SO EVIDENT A YEAR AGO. A FORMAL EVALUATION OF THE MARKETING EFFORT SHOULD BE DONE ON AT LEAST AN ANNUAL BASIS. THIS CAN BE ACCOMPLISHED BY HAVING ANOTHER TRANSIT MANAGER VISIT THE SYSTEM AND MAKE RECOMMENDATIONS OR PERHAPS THE LOCAL NEWSPAPER EDITOR OR RADIO STATION MANAGER COULD HELP IN THE EVALUATION. WHAT IS NEEDED IS SOMEONE TO VISIT THE SYSTEM WHO IS MARKETING ORIENTED AND KNOWLEDGEABLE ABOUT PUBLIC TRANSPORTATION.

AN EXCELLENT MARKETING EVALUATION CHECKLIST IS CONTAINED IN SOURCE 1. IT COVERS A BROAD RANGE OF MARKETING ACTIVITIES AND CAN BE USED TO GUIDE IN THE DEVELOPMENT OF A MARKETING PLAN.

DURING THE EVALUATION PROCESS THE SERVICE DELIVERY EFFORT, INCLUDING ROUTING AND THE BASIC OPERATING PROCEDURES SHOULD RECEIVE PRIMARY ATTENTION. WITHOUT A GOOD PRODUCT IT IS DIFFICULT TO HAVE A GOOD PROMOTION EFFORT. AND BY GIVING SPECIAL ATTENTION TO THE PRODUCT DURING THE EVALUATION AREAS FOR IMPROVEMENT MAY BE IDENTIFIED.

IN SUMMARY, MARKETING IS NOT MAGIC. IT IS A LOGICAL PROCESS SUBJECT TO RESEARCH AND DEVELOPMENT JUST LIKE ANY OTHER IMPORTANT COMPONENT OF THE TRANSIT SYSTEM. CERTAINLY AT TIMES IT BORDERS ON BEING AN ART AND CAPTURING THE MOOD OF POTENTIAL RIDERS MAY TAKE A CERTAIN AMOUNT OF LUCK. HOWEVER NO SLICK HUCKSTER IS GOING TO IMPROVE THE IMAGE OF SYSTEM RIDERSHIP WITH SOME BAG OF TRICKS. ONLY COMPETENT MANAGERS PROVIDING REASONABLE SERVICES WHICH THE PUBLIC WANTS CAN IMPROVE OR CREATE A POSITIVE IMAGE AND IMPROVED RIDERSHIP. NOTHING IS WORSE IN THE COMMUNITY RELATIONS ARENA THAN SOME GLITTERING PROMOTIONAL CAMPAIGN ACCOMPANIED BY A RAG TAG SERVICE. BOTH THE SERVICE AND THE MARKETING EFFORT MUST BE IN HARMONY AND FOLLOW SOME WELL CONCEIVED PLAN. BY FOLLOWING THE GENERAL APPROACH OUTLINED IN THIS PAPER HOPEFULLY A WELL CONCEIVED MARKETING PLAN CAN BE DEVELOPED WHICH WILL AID IN ACHIEVING A SUCCESSFUL TRANSIT SYSTEM.



## REFERENCES

1 MARKETING ORGANIZATION, TRANSIT MARKETING MANAGEMENT HANDBOOK, WASHINGTON, D.C., U.S.D.O.T., UMTA, OFFICE OF TRANSIT MANAGEMENT, NOVEMBER 1975, PAGE 47.

2 MASS TRANSIT MANAGEMENT: A HANDBOOK FOR SMALL CITIES, ORIGINALLY PREPARED FOR UMTA, INDIANA UNIVERSITY, BLOOMINGTON, INDIANA, ORIGINAL 1971 REVISED 1978, PAGE 8:14.78, CH3, 12.

3 POSITIONING IN PR, AL RIES AND HOWARD GELTZER, RIES AND GELTZER PR, 1212 AVE. OF THE AMERICAS, NY, NY 10036, PAGE 3-4.

4 "THE POSITIONING ERA", JACK TROUT AND AL RIES, ADVERTISING AGE, APRIL 24, MAY 1, AND MAY 8, 1972, REPRINTED IN BOOKLET FORM BY RIES CAMPIELLO COLWELL, INC. 1212 AVE. OF THE AMERICAS, NY, NY 10036, PAGE 38-41.





### NOTICE

This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof.

This report is being distributed through the U.S. Department of Transportation's Technology Sharing Program.

DOT-I-81-16

DOT LIBRARY



00399765

**DOT-I-81-16**

# **TECHNOLOGY SHARING**

**A PROGRAM OF THE U.S. DEPARTMENT OF TRANSPORTATION**